DOCUMENT RESUME

ED 129 997 95 CE 008 030

TITLE	Career Education Evaluation 1974-1975. Interim Report. Lincoln Career Education Project.
INSTITUTION	Lincoln Public Schools, Nebr.
SPONS AGENCY	Office of Education (DHEW), Washington, D.C.
REPORT NO	VT-103-107
BUREAU NO	F7136VW
PUB DATE	Dec 75
GRANT	OEG-9-73-5290
NOTE	94p.
EDRS PRICE	MF-$0.83 HC-$4.67 Plus Postage.
DESCRIPTORS	*Career Education; Cooperative Planning; *Cooperative Programs; Curriculum Development; Educational Assessment; Educational Research; Elementary Secondary Education; Fused Curriculum; Program Administration; Program Descriptions; Program Development; *Program Effectiveness; *Program Evaluation; *School Community Programs; School Districts; Statistical Analysis; Tables (Data); Vocational Development
IDENTIFIERS	Nebraska (Lincoln)

ABSTRACT

Evaluation description, data, and conclusions are presented for the second year of a 3-year career education program designed to assist the community and schools in implementing career education by providing leadership in developing a cooperatively designed plan and by providing management and support services in implementing the plan. The evaluation report is organized around three general concerns: (1) Project accomplishments in terms of stated project objectives, (2) implementation of career education activities, and (3) impact of the project on student outcomes. Conclusions presented indicate that (1) the project has achieved, or is making progress toward, most of the project objectives, (2) there was a significant increase in the number of career education activities in the schools, and (3) the project did not have a measurable impact on student outcomes. Tables included show the comparison of scores for treatment and control groups. Appended to the report are the treatment group outcome area table, summary of the evaluation design, implementation summary, career education project teacher feedback questionnaire, summary data on valuing approach to career education, revised outcome question/treatment group matrix, summary data on 1974-75 sampling plan, and summary data on student outcomes. (TA)

Documents acquired by ERIC include many informal unpublished materials not available from other sources. ERIC makes every effort to obtain the best copy available. Nevertheless, items of marginal reproducibility are often encountered and this affects the quality of the microfiche and hardcopy reproductions ERIC makes available via the ERIC Document Reproduction Service (EDRS). EDRS is not responsible for the quality of the original document. Reproductions supplied by EDRS are the best that can be made from the original.

ED129997

CAREER EDUCATION EVALUATION 1974-1975

INTERIM REPORT

Project No. F7136VW
Grant No. OEG-9-73-5290

Lincoln Career Education Project

Exemplary Project in Vocational Education
Conducted Under
Part D of Public Law 90-576

The project reported herein was performed pursuant to a grant from the Office of Education, U. S. Department of Health, Education, and Welfare. Contractors undertaking such projects under Government sponsorship are encouraged to express freely their professional judgment in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official Office of Education position or policy.

Submitted by
Lincoln Public Schools
John Prasch, Superintendent
Carl Spencer, Project Director

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

December, 1975

VT-103-107

CE 001 030

TABLE OF CONTENTS

	Page
Summary of Report	1
Description of Project	6
Problem Area	6
Goals and Objectives	8
General Project Design	9
Career Education Evaluation Report	11
Question 1: To What Extent Did the Project Staff Complete the Modified Plan of Work Described in The Proposal?	12
Question 2: What Career Education Activities Were Provided for Students?	19
Question 3: What Was the Impact of the Career Education Activities on Students?	25
Conclusions and Recommendations	34
Appendices	36
Appendix 1 Treatment Group Outcome Area Table	36
Appendix 2 Summary of Evaluation Design	47
Appendix 3 Implementation Summary	49
Appendix 4 Career Education Project Teacher Feedback Questionnaire	64
Appendix 5 Summary Data on Valuing Approach to Career Education	66
Appendix 6 Revised Outcome Question/Treatment Group Matrix	71
Appendix 7 Summary Data on 1974-75 Sampling Plan	75
Appendix 8 Summary Data on Student Outcomes	78

LIST OF TABLES

Table		Page
1	Approximate Number of Students Participating in out of School Learning Experiences by Quarter by Grade Level	.17
2	General Educational Treatments Incorporated into the Lincoln Career Education Program by Goal Statement by School	.20
3	Outcome Instrument Pairings Utilized in 1974-75 Career Education Evaluation	.28
4	Comparison of Scores of Ninth Grade Students in Career Education Target Schools with Ninth Grade Students in Control Schools on all Four Subtests of the Career Maturity Inventory	.30
5	Comparison of Scores of Twelfth Grade Student in Career Education Target Schools with Twelfth Grade Students in Control Schools on all Four Subtests of the Career Maturity Inventory	.31
6	Comparison of Scores of Ninth Grade Students in Career Education Target Schools with Ninth Grade Students in Control Schools on all Five Subscores of the Assessment of Career Development	.32
7	Comparison of Scores of Twelfth Grade Students in Career Education Target Schools with Twelfth Grade Students in Control Schools on all Five Subscores of the Assessment of Career Development	.33

SUMMARY OF REPORT

TIME PERIOD COVERED BY REPORT: June 11, 1974 - June 10, 1975

GOALS AND OBJECTIVES OF THE PROJECT:

The Career Education Project will be considered to have been successful if by the end of its third year a cooperative comprehensive career education program is operating in the Lincoln schools and community which enhances opportunities for all students by:

1. making learning experiences more meaningful and relevant to the individual through restructuring curriculum and refocusing it around career development themes.
2. providing all youth the guidance, counseling, and instruction needed to develop their self-awareness and self-direction; to expand their occupational awareness and aspirations; and to develop appropriate attitudes about the personal and social significance of work.
3. preparing all youth to undertake entry-level employment or further education.
4. providing services for placing each student in the next step in his career development whether it be employment or further education.
5. building into the educational program greater coordination and utilization of all community resources for career education.
6. increasing the educational and occupational options available to all persons through a flexible educational system which facilitates entrance and re-entry either into the world of work or the educational system, and through increased use of experiences in which work and learning programs are closely correlated.

GENERAL PROCEDURES FOLLOWED:

Lincoln Career Education Program

The Lincoln Career Education Program is an ongoing set of activities designed to reach goals agreed upon by the schools and community. The program is centered in the local school buildings, but it is supported by cooperative efforts of the Lincoln Public Schools Central Offices, and other organizations, groups and individuals in the community. These include educational and training institutions, businesses and industries, community agencies, and parents, as well as students. The program may vary from building to building in the school system, but it achieves identity through the set of goals adopted for it by the school and community. In this connection it is important to establish two principles: (1) goals and overall assessment objectives for students are determined for the district by cabinet, and (2) programs to reach those goals and objectives with students are determined and operated by schools. In that context the project joins other central offices as an interpreter of goals and objectives and supporter of local school programming efforts to reach them. The project, then, has no goals for students per se; rather the project's goals are facilitative.

Lincoln Career Education Project

The Lincoln Career Education Project is a short term organization of resources. These resources are focused on the tasks of planning and implementing long range improvements in the Career Education Program. It was established by the Superintendent's Cabinet of the Lincoln Public Schools after this group determined that the present program was not meeting the goals established for it. The Cabinet organized a Planning Group representing those most interested and involved in Career Education to plan the project and a Project Staff to carry out the activities assigned to the project. As the project became operational, that planning group became the Advisory Council.

Overall Strategy of the Project

The goals of Career Education belong to the schools and community, not the project. Career Education has always existed through activities of school and community. The purpose of the Project is to help clarify those goals so that existing activities may become more purposeful and so that together with school and community new activities may be designed to achieve purposes which are not now being fully achieved. These clarified goals, and the new and refined activities necessary to reach them, become the Career Education Program. This program is not seen as a separate and distinct program in the way mathematics or art instruction, food services, or guidance are separate and distinct. Rather, the goals and activities of the Career Education program are infused into the already existing program structure. Therefore, the project works with and through existing program organizations rather than establishing new ones. In Lincoln the primary instructional program organization is the local school building. At the central level the cabinet sets goals and objectives for programs based upon Board policy. Departments and consultants assist schools to reach those goals and objectives. Of secondary importance as program structures are the businesses, industries, various community agencies and resources, and parents. The project coordinates planning and programming by these agencies and groups in the area of Career Education.

Specific Major Activities

1. Establish a "cadre" in each target school; train the cadre to implement career education objectives and activities in their work with students and to act as change agents in getting other staff to do the same.
2. Support the cadre with a coordinator from the central staff in each building who assists the school to develop a plan for career education, provide in-service training as needed, and provide a link between practitioners and resources.
3. Support the whole change operation by a central office staff who (a) establish and circulate a set of career education learning materials (b) compile a bank of community resources and make them available to local school staff members (c) develop needed program elements for inservice, instructional, or guidance programs.
4. Provide support to planning efforts by existing central office departments so they may provide long-term leadership in career education by incorporating career education program goals into

their plans for working with schools.

5. Gain support from community and parents for career education programs.

ACCOMPLISHMENTS

General Outcomes

The project assisted each target school and each central office department in the construction of a plan for bringing about improvements in career education through programs for which the school or department was responsible. The major activities of the project were thus identified and brought into a format from which they could be managed.

Improvement Plans

Improvement plans were written by the following schools and central office departments:

- Brownell Elementary
- Blessed Sacrament Elementary
- Mickle Junior High
- Goodrich Junior High
- East Junior High
- East Senior High
- Southeast Senior High
- Lincoln High School
- Northeast High School
- Pius X High School
- Office of Curriculum and Instruction
- Guidance Department of Student Services
- Special Education Department of Student Services

Central Office Program and Staff Development Accomplishments

- Needs Assessment of Lincoln Public School students
- Rewriting of Lincoln Public School Goals for Students
- Identification of Lincoln Public School Career Education Goals for Students
- Mid-Winter Workshops, January 1975
- Staff Development Workshops in local schools
- District-wide program development workshops (English/Media--Communications/Media, Curriculum Units, Food services-Child Care-Hospitality, Foreign Language, etc.)
- Establishment of Curriculum Center

Central Office Community Resources Service

- Catalog containing several hundred community resources published.
- "Hot-line" service provided direct to teachers.
- More than 4000 students served with at least one resource.
- In-service training events planned and conducted

Program Activities in Schools

- Elementary Awareness Activities infused
- Valuing Approach to Career Education installed in two elementary schools
- Career Education activities infused into elementary program through learning centers
- Project Discovery Exploration program installed in four junior high schools.
- Career Guidance activities implemented in all junior and senior high schools.
- Career Information provided through curriculum imbedded experiences in all junior and senior high schools.
- Career Information Centers established in each senior high school.
- Placement services rendered to approximately 260 exiting senior high school students.

EVALUATION RESULTS: CONCLUSIONS AND RECOMMENDATIONS

The evaluation report is organized around three general concerns: (1) Project accomplishments in terms of stated project objectives, (2) Implementation of career education activities, and (3) Impact of the project on student outcomes.

Conclusions:

1. The Lincoln Career Education Project has successfully achieved or is making progress toward achieving the intent of most of the stated product objectives.
2. The Lincoln Career Education Project has resulted in an increase in the number of career education activities being undertaken in target schools.
3. The number of students participating in career education activities has increased markedly from 1973-74 to 1974-75.
4. The Lincoln Career Education Project did not have a measurable impact on student outcomes as measured by either the *Assessment of Career Development* or *Career Maturity Inventory*. The differences between Lincoln students attending career education target schools and students attending control schools were not significant at either the 9th or 12th grade levels. However, Lincoln career education students scored as high or higher than national and regional norm groups.
5. The Lincoln Career Education Project resulted in the increased use of planning as a means of systematic curriculum modification. Improvement plans were developed by all career education target schools. The second year plans were superior and more useful than the first year plans.

Recommendations:

1. More attention be given to developing a comprehensive delivery system for career education activities, particularly at the secondary level. Participation in career education activities at the secondary level is presently determined more by chance factors than by student needs.

2. Continuing attention needs to be given to standardizing and coordinating the planning activities being used at the local school levels. The plans developed during the 1974-75 school year varied greatly from school to school in both form and language. These inconsistencies make it very difficult to determine the accumulative impact of the project on the district.
3. The evaluation design needs to be modified. The failure to find significant differences between career education and control students could be due to shortcomings in the design. Consideration should be given to (1) census testing in career education target schools, (2) monitoring student participation in career education activities, and (3) analyzing the career education status of the control high school prior to making any comparisons.

DESCRIPTION OF THE PROJECT

PROBLEM AREA TOWARD WHICH THE PROJECT WAS DIRECTED

The following narrative includes pertinent data to support the need for initiating an exemplary program for Career Education in Lincoln. In a series of meetings in the summer of 1971, the following goals were accepted by the citizens of Lincoln and later adopted by the Board of Education:

Goals of Economic Effectiveness

The educated person

is ready for appropriate and satisfying employment or is prepared to profit from further training for a chosen vocation

is aware of the requirements and opportunities for various occupations and professions

knows the satisfaction of good workmanship and appreciates the social value of work

maintains and improves his work efficiency

is economically self-sufficient, plans his own economic life, and is an informed consumer.

Goals of the Lincoln Public Schools for Community

The school district will:

1. Strive to provide students appropriately trained to participate in the economic life of the community.
2. Use the services and advice of business, industry and professional personnel to assure the appropriateness of its vocational and technical programs.

According to the Guidance Officer's report the number of dropouts during 1971-1972 in the public senior high schools was 369 and of this number 246 were boys and 123 were girls. In addition, Pius X Central Catholic High School reported 14 dropouts. According to the guidance report, the greatest number of dropouts occur in the senior high schools at age 16 for boys and 17 for girls.

Many of these youth leave school with neither entry-level skills nor the motivation to seek further vocational training. They will have difficulty becoming a productive adult in this technological age. Formerly there were many unskilled positions open to them; this is no longer true.

For the young woman, marriage and motherhood were at one time sufficient occupations; this is no longer always true. Even the hope held by so many of receiving vocational training in the military service may be unfounded. More than at any time in history, youth need a high school diploma accompanied by entry-level skills, or a plan for post-secondary vocational training, or a plan for attending a college or university to learn a profession.

The current cry of youth is for relevance. In the case of the dropout, actual or potential, this need is most critical. The relevance which is needed, and which is so often lacking, is a tie between what school is and how it assists the individual to fit into the world of work. This is particularly true for the youth from a deprived background where there may have been little or no opportunity to learn about a variety of occupations or what it takes to enter gainfully into a career.

In addition to the guidance report on the school district's dropout rate, the following vital statistics related to career education and guidance in the Lincoln public and private schools has been collected.

–There has not been a well defined philosophy which places emphasis on career education.

–There is insufficient career information for counselors in the secondary schools, and inadequate means to get the information to students.

–Counselors and teachers are in need of training for a working knowledge of the world of work.

–There is a lack of communication between agencies concerned with career guidance.

–There are 1,784 students in level 1-6 in parochial schools in Lincoln, Nebraska.

–There are 1,380 students in levels 7-12 in parochial schools in Lincoln, Nebraska.

–Generally speaking, the pupil-counselor ratio in elementary school is low. Only six of the 30 public elementary schools have a counselor.

–Pupil-counselor ratio in secondary schools (7-12) is more than 250 to 1.

–Counselors are requesting more formal course work and on-the-job experience related to career counseling. Additional initiative is needed in this area.

–The Office of Student Employment insists that current and more meaningful information on career opportunities for youth is imperative.

–Administrators, counselors, and teachers partially attribute the dropout problem to the lack of career information and programs which may interest youth while still attending school.

This project will contribute to creating bridges between school and earning a living by developing a comprehensive career orientation and development program beginning at the elementary levels, and continuing through high school. The present Career Development Program is made available to the students of the Lincoln Public Schools on an elective basis with counselor recommendation and approval of the principal. The program is designed for students who receive supervised vocational experience and to help those students whose economic and emotional needs are causing them to be alienated from school. Within the present work-experience structure there are several basic components--each operating in coordination with the others and each with a designated counselor or supervisor.

These components include the general Work-Study Program, Special Vocational Needs, Neighborhood Youth Corps, the Developmental Learning Work-Study Program, the Distributive Education Program, and Educational Participation in the Community Program. It is our desire to continue with these programs. There will be an effort to directly involve school guidance personnel in job placement by adding career counselors to the high schools through a companion program funded by Exemplary Vocational Funds. Another bridge will be the released time program which will enable teachers and counselors to experience first hand career experience in the community.

Cooperation between the Lincoln Public Schools, the private non-profit schools, Employment Agencies, Vocational Guidance Services, the Chamber of Commerce, the National Alliance of Business and Industry, and other agencies will be important when there is a need for input into and coordination of the career education program. Representatives from these agencies will participate in the career education materials selection or development workshops and the inservice programs for teachers, counselors, administrators, and other staff members.

By increasing career awareness in the elementary schools, the aspirations of these youth should increase and they will be able to make more meaningful and appropriate career choices as they progress in school, knowing well that their choice might change as they grow older and seek new employment.

Technological change has thrown up a dramatic challenge to this nation's political, economic, social, and education institutions. School curriculums designed to serve society's needs cannot be limited to traditional educational content or substitutes for real life involvement. Programs developed to explore the concepts of career education are needed by students in order that they might understand the nature of work as it applies to them today and tomorrow.

Teachers in general and counselors more specifically have not been exposed to or trained in career education concepts. Therefore, the development of a sequential, well-articulated program which blends academic and vocational programs into one that would be responsive to the changing nature and characteristics of work, accelerated opportunities for personal choice and fulfillment in work alternatives, and a growing awareness of the affective component of choice and work behavior is essential.

GOALS AND OBJECTIVES OF THE PROJECT

The overall purpose of the Lincoln Career Education Project is to assist the community and its educational system in implementing the concepts of Career Education by

1. Providing leadership for the development of a cooperatively designed plan in which existing structures and services are integrated with necessary additional structures and services to achieve an improved program for delivering career education to youth, and
2. Providing management and support services necessary to assist participants--cooperating educational agencies, businesses, industries, unions, governmental agencies, community agencies, parents, and students--in executing the plan.

The Career Education Project will be considered to have been successful if by the end of its third year a cooperative comprehensive career education program is operating in the Lincoln schools and community which enhances opportunities for all students by

1. Making learning experiences more meaningful and relevant to the individual through restructuring curriculum and refocusing it around career development themes.
2. Providing all youth the guidance, counseling, and instruction needed to develop their self-awareness and self-direction; to expand their occupational awareness and aspirations; and to develop appropriate attitudes about the personal and social significance of work.
3. Preparing all youth to undertake entry-level employment or further education.
4. Providing services for placing each student in the next step in his career development whether it be employment or further education.
5. Building into the educational program greater coordination and utilization of all community resources for career education.
6. Increasing the educational and occupational options available to all persons through a flexible educational system which facilitates entrance and re-entry either into the world of work or the educational system, and through increased use of experiences in which work and learning programs are closely correlated.

GENERAL PROJECT DESIGN

The Lincoln Career Education Project is built on the assumption that the goals of the project can better be realized through existing staff and change mechanisms and through what additional staff and mechanisms which might be made available through setting new goals and restructuring priorities in existing educational and other agencies rather than to provide a new staff and structures funded by the temporary grant. With the exception of the Placement Component, no new staff positions would be created with the expectancy that the school system would begin to support those positions as the project draws to a close. Rather the project focuses on the change processes and mechanisms already in existence and assists the leadership of the school and community to plan and implement the Career Education Program including making provisions for reassigning of staff and creating new positions if necessary. By so doing the project should avoid the mistake made so often in which an ambitious project writer creates a new structure which does not really fit the needs of the participants and which eventually is rejected or drastically revised. And in addition the focus is immediately placed upon the involvement of the permanent staff and structures which is so necessary if the concepts of Career Education are to be infused into the educational experiences available to youth in our community.

Several target schools were selected in which to begin the project. These schools include all of the high schools: East, Northeast, Southeast, Lincoln High, and Pius X High Schools. They include East, Mickle, and Goodrich Junior Highs and Brownell and Blessed Sacrament Elementary Schools. The total student population of the high schools is approximately 7000; of the junior highs approximately 1300; and of the elementary schools approximately 400.

A coordinator was assigned from the project staff to work with the staff of each of these schools. The coordinators were assisted by the central office Specialist in Planning and Evaluation to establish in each of

these schools a comprehensive plan for implementing career education based upon the Lincoln Public Schools Career Education Goals for Students. These plans made use of the regular leadership structures of the schools and the procedures for implementing programs and managing instruction. The coordinators also acted as assistants in implementing these plans--giving in-service help, assisting departments or teams or individual teachers in the writing of lesson plans incorporating career education, serving as a resource link to career education ideas and material., and in the high schools working directly with students in some cases to assist in career guidance and placement in full-time or part-time employment.

At the central office an additional 1½ staff persons were assigned the task of providing services to school staff who wished to make use of community resources. A catalog of resources was compiled and distributed to each teacher in all target schools. Hot-line services were provided when resource needs arose for which no resource was listed in the catalog and in-service training provided to teachers so they could use the catalog and make good use of the resources provided, both in and out of school.

Finally, staff and curriculum development activities were developed and conducted by a person assigned half-time to this task. A number of workshops were conducted at the district level and assistance was also given to conducting inservice training at local buildings.

The project was directed by a full-time director who was assisted by a part-time specialist in Planning and Evaluation. Together they planned with central office departments to incorporate career education outcomes and activities into the plans of central office departments as they worked with schools across the district.

Details of the activities carried out by the project staff and the staff of project schools will be found in the evaluation report which follows.

CAREER EDUCATION EVALUATION REPORT
1974 - 1975

Evaluated by
Educational Service Unit No. 18
William T. W[illegible]kman, Administrator

Carl D. Novak (Principal Investigator)
Paul G. Monkowski
William W. Walker

December, 1975

CAREER EDUCATION EVALUATION REPORT

The text of this report is organized around evaluation questions. The three questions are:

1. To what extent did the project staff complete the modified plan of work described in the proposal?
2. What career education activities were provided for students?
3. What was the impact of the career education activities on students?

The first question focuses on the congruence between the planned career education activities and those activities actually implemented. Discussion regarding the first question is organized around the product objective for the Lincoln Career Education Project as outlined in the original Project Document and modified in the continuation proposal.

The second question focuses on the implementation of career education activities in the target school. A system for categorizing and describing local school activities is summarized and the conclusions, based on an analysis of this implementation data, discussed.

The third and final section of this Chapter focuses on student outcomes associated with the 1974-75 Career Education Project. The evaluation of student outcomes followed the guidelines established in a draft of *Handbook for the Evaluation of Career Education Programs*, dated August 15, 1974.

QUESTION 1. To what extent did the project staff complete the modified plan of work described in the proposal?

The accomplishments of the Career Education Project during the second year of the program were analyzed in terms of the Product Objectives. The objectives and the evidence available to determine whether or not the objectives were achieved were reviewed by the Project Director, the Career Education Planning Specialist and a representative of the Evaluation Team. Status judgements were based on best estimates of the degree to which both the content of the objectives was achieved and the intent of the objectives fulfilled.

The results of the objective review are presented by component. The five components are: (1) Support Systems Component; (2) the Support Systems Curriculum and Staff Development Component; (3) The Guidance Component; (4) the Placement Component; and (5) the Planning, Management and Evaluation Component.

SUPPORT SYSTEMS COMPONENT

Product Objective 1. By January, 1974, a prototype system will be in operation in participating schools for locating, analyzing, and delivering to teachers and administration a comprehensive inventory of logistical resources available in the community for the achievement of Career Education goals. By September 1, 1974, the system will be revised so that it is perceived by those who have developed and used it as having been significantly improved.

A prototype community resource system was developed and implemented during the first year of the project. The system included (a) a catalog of resources available in the community and(b) central office staff to follow up on requests that could not be filled through the use of the catalog. The project continued to use the system as originally intended throughout the second year of the Project. Objective 1 was achieved.

Product Objective 2. By January, 1975, a prototype system will be in operation in participating schools for coordinating in school/field experiences for teachers and students within a time framework; by September 1, 1975, the system will be revised so that it is perceived by those who have developed and used it as having been significantly improved.

The prototype system was being used in participating schools by Fall, 1974. The system includes a catalog of career education community resources, local school files, and central office staff. In-service training was provided to school staff both in the use of the system and in the use of the resources listed in the catalog. The catalog was reorganized by career clusters during the year to make it more convenient to use. Objective 2 was achieved.

Product Objective 3. By October 1, 1974, a prototype Career Information Center will be in operation in each secondary school meeting the established criteria.

A Career Information Center is operating in each Career Education target high school. The centers at the high school meet the four criteria established for career information systems. Career information is also being disseminated in the junior high schools but the services are not being provided through a centrally located career information center and therefore do not meet the criteria established for Objective 3. Therefore, this Objective has been fully achieved at the senior high level but only partially at the junior high level.

Product Objective 4. By September 1, 1974, a prototype pupil data and monitoring system possessing the following characteristics shall be in operation in participating schools: (a) provides individual student feedback on basic skill areas; (b) monitors students through career education units which may be available; (c) provides individual student assessment on basis of national norms, class norms, and in relation to his predicted potential; (d) provides physical, biographical and psychological data; and (e) presents the above information in such a way it may be correlated with information provided by the Career Information System by teachers, counselors and individual student consumers.

No pupil data and monitoring system has been developed; therefore, Objective 4 was not achieved.

CURRICULUM/STAFF DEVELOPMENT

Product Objective 1. By June 12, 1973, the project will conduct and report the results of a comprehensive needs assessment of the Lincoln schools, with particular emphasis upon Career Development needs.

A needs assessment was completed during the first year of the project. Objective 1 was achieved.

Product Objective 2. A staff development program based upon results of needs assessment will be in continuous operation beginning July 15, 1973.

The staff development program includes staff development activities organized and conducted both by the central staff and by local school staff. Examples of staff development activities organized by central staff include the summer content area workshops while workshops on departmental Career Education plans are examples of local staff development activities. Objective 2 was achieved.

Product Objective 3. In participating schools, 60% of the teaching staff shall incorporate at least one career education learning experience in each class, during 1974-75 and at least 75% shall do so during 1975-76.

Seventy-four percent of the teachers in participating schools planned and carried out one or more Career Education learning experience activity. Approximately 40% of the teachers carried out five or more activities. Objective 3 was achieved.

Product Objective 4. By September 1, 1974, a plan shall be in operation which details cooperative arrangements between the Lincoln Technical College and the project high schools.

Progress was made in the area of auto-mechanics. Lincoln graduates were awarded advanced placement in Lincoln Technical College on the basis of competency tests. The Lincoln Technical College (Milford Campus) and the Lincoln Public Schools also reached agreement on the scope of the auto-mechanics class taught at each institution. Further coordination between the two institutions proved to be too time consuming and too involved for the Career Education Project. Therefore, a separate project was written and funding requested to coordinate Lincoln Public School and Technical College efforts in other technical areas. Objective 4 was only partially achieved.

GUIDANCE COMPONENT

Product Objective 1. By October 15, 1974, the guidance departments of participating schools will have completed a comprehensive needs survey to determine the guidance needs of students.

Initial steps were taken to achieve Objective 1. An assessment instrument, the Priority Counseling Survey, was adopted, revised and used by some schools. The survey was not, however, administered district wide. The Priority Counseling Survey was designed to provide information on Career Guidance only, and therefore, could not be considered to be comprehensive. Therefore, Objective 1 was only partially achieved.

Product Objective 2. By February 15, 1975, three target high schools and one target junior high school will prepare and have in operation a guidance system in which professional staff become advisors or advocates for a group of not more than 25 students who choose or are assigned to them. Each advisor shall meet regularly and on demand with students for whom he is responsible, with the goals of (a) preparing a tentative career plan, (b) providing information about the student to him at critical decision-making points, (c) improving students personal-social decision-making skills and (d) referring students who need counseling to qualified counselors.

The staff-advisor concept was, by the end of the 1974-75 school year, being used in three senior and three junior high schools. Objective 2 specified that the concept would be used in three senior high schools and one junior high school. The advisor-student ratios were within the 25 to 1 ratio specified in Objective 2. Not much information is available on the extent to which the student outcomes specified in Objective 2 were achieved. Based on the best information available it appears that not as much emphasis was placed on student career plans as was originally anticipated. It is not possible at this time to estimate the impact of the staff advisor concept on students. The programmatic aspects of Objective 2 were achieved, but no information is available on outcomes.

Product Objective 3. By November 15, 1974, working with an appropriate group of consultants, counselors, teachers, etc., the Director of Guidance will coordinate the production of a plan for developing and implementing a 7-12 individual student assessment program, part of which will be learning units and part will be independent of learning units. Such a program will bring together pertinent information about students to be available for the student, his parents, and his advisor or counselor for use in Career Planning.

A number of student assessment activities have been analyzed, and to a lesser extent, implemented. However, the assessment activities have not been integrated into a total student assessment program. Examples of assessment activities include such standardized instruments as the Priority Counseling Survey, the California Occupational Preference Survey and the Kuder Interest Inventory, as well as a number of non-standardized instruments developed by district career education staff. Objective 3 was only partially achieved.

While not all the objectives in the Guidance Component were fully achieved, progress was made on each one. Work in the Guidance Component was suspended when it became apparent that guidance would be the subject of a district-wide assessment and planning effort during the 1975-76 school year. Further progress in the Guidance Component is feasible only as part of the district guidance program.

PLACEMENT COMPONENT

Product Objective 1. A Placement Service for exiting students shall be operative in each participating school. In each school the program shall meet 90% of the success criteria established for the program, such criteria to be applied to the plan not later than November 15, 1974; and to the operation of the program by February 15, 1975. The criteria shall be established by a committee composed of a

project staff member appointed by the Director; a consultant appointed by the Associate Superintendent for Instruction of Lincoln Public Schools; State Department Consultant appointed by the Assistant Commissioner for Vocational Instruction; a representative of non-school placement agencies, a student, and an adult member of the advisory Council appointed by the Chairman of the Advisory Council; and a representative from each participating school selected by the principal of that school. The performance level may differ among schools. Criteria shall specify both standards and minimum level of performance. The topics dealt with by the criteria may include but are not necessarily limited to the following:

a. which students are to be served
b. relationships to on-going program and existing staff of school
c. assessing quality and amount of services provided to students
d. assessing the impact of the program on the other school programs
e. assessing the impact of the program upon students placed and the agencies with whom they are placed
f. relationships with non-school placement agencies.

A placement service was implemented in every target high school. The service was planned by a representative central committee and implemented by local schools. The placement service was not, however, formally evaluated. Description of the placement services are available. During the 1974-75 school year post-school placement services were provided to approximately 220 students.[1] No follow-up data was collected on the students served. The programmatic aspects of Objective 1 were achieved but no information is available on the effect on students.

Product Objective 2. As compared to similar experiences on May, 1973, by February 1, 1974, in each participating school there shall be an increase of a minimum of 20% in the participation of students in curriculum-embedded, long and short range, paid and unpaid, learning/working experiences.

More than 2,500 students were placed in non-exiting, paid and unpaid learning and working experiences. Placements are summarized in Table 1.

No baseline information was available so it is impossible to document whether or not there was an increase. Objective 2 was probably achieved.

---

[1] Exiting job placement services in three target high schools. Number of students served was not available for the fourth target high school.

TABLE

Approximate Number of Students Participating in Out of School Learning Experience by Quarter by Grade Level

	Second Quarter	Third Quarter	Fourth Quarter
High School	800	1,400	520
Junior High	630	700	270
Elementary	–	30	–
Total	1,430	2,130	790

Product Objective 3. As compared to the attitude in September, 1973, the attitude of students, parents, and school staffs shall be significantly more positive toward the placement services offered in each school.

No data is available on the attitudes of either students, parents or staff towards the placement services offered in each school. Therefore, it is impossible to determine whether or not Objective 3 was achieved.

PLANNING MANAGEMENT-EVALUATION COMPONENT

Product Objective 1. By the end of the tenth month of each funding period the project will make significant progress in achieving each of the overall goals, as measured by appropriate evaluation techniques and certified by a third-party evaluation or educational auditor.

The two goals of the Career Education Project as described in the original project document, page 4 are:

(1) to provide leadership for the development of a cooperatively designed plan in which existing structures and services are integrated with necessary additional structures and services to achieve an improved program for delivering Career Education to youth, and

(2) to provide management and support services necessary to assist participants--cooperating educational agencies, businesses, industries, unions, governmental agencies, community agencies, parent and student--in executing the plan.

Significant progress has been made in the planning for and providing career education services to youth. Most of the planning has been taking place at school building level. A single, comprehensive plan integrating all the school and central office plans has not yet been developed. Such a plan is not feasible at the present time. Management and support services have been provided; however, they have primarily been limited to schools; they have not been used extensively by external agencies. Objective 1 has only been partially achieved.

Product Objective 2. By the end of the tenth month of each funding period, the project will meet 85% of the product and process objectives stated under each component as measured by appropriate evaluation techniques and certified by a third-party evaluator or educational auditor.

The career education either fully or partially achieved 12 of the 14 Product Objectives in the four Operational Components. Six were judged to be fully achieved and six only partially achieved. No information or only inadequate information was available to make judgements about one of the remaining objectives. One objective was clearly not achieved. No analysis was made of the Process Objectives. Objective 2 was, for the most part, achieved.

Product Objective 3. At the end of the tenth month, the third-party evaluator will rate the planning/management/evaluation activities of the project significantly higher than the mean of other local efforts on a scale measuring the degree to which such efforts are conducted in a systematic and scientific manner.

The Career Education Project focuses upon the support of change, a process, rather than the production and implementation of instructional processes or materials. The Lincoln Career Education Project involves also six schools, each developing unique sets of career education activities. Therefore, most local projects are not strictly comparable. The leadership provided through the planning-management-evaluation activities has enabled schools to develop and to a lesser extent, implement local career education plans. The local plans are more systematic than any previously developed. The planning-implementation process has not been without problems however, most of the problems have either been resolved or worked around. The management staff has in the opinion of this evaluator, done a good job in keeping the project on task (at times under trying conditions) and has achieved Objective 3.

Product Objective 4. By May, 1975, 70% of the teaching and supportive staff, 90% of the administration, and 10% of the people of Lincoln will respond to Career Education and to the work of the Lincoln Career Education Project.

Collection of the information needed to determine whether or not Objective 4 was achieved was not incorporated into the 1974-75 evaluation plan. Therefore, the status of Objective 4 can not be evaluated.

Product Objective 5. Evaluation efforts under this component shall provide timely, valid and reliable information on all major project decisions, and all major decisions shall be based on such data.

The role of evaluation changed from the first year of the project to the second. As originally conceived, evaluation was to provide direct support to the project director in the day-to-day management of the project. As presently functioning, evaluation is monitoring the project accomplishments and student outcomes. The results of the evaluation should be useful in

developing plans and determining impact but are not appropriate in the day-to-day decision-making. Many of the original evaluation functions have, instead, been assumed by the Planning Specialist. Objective 5 is no longer appropriate.

QUESTION 2. What career education activities were provided for students?

Both the implementation data discussed in this section of the report and the data on the effect of the program on students discussed in the next section were organized around the nine Career Education Objectives and Associated Student Outcomes identified in the *Handbook for the Evaluation of Career Education Program.*[2] The project staff developed a list of statements describing general Career Education treatments, (career education oriented activities). The list included a total of 36 general treatments. The treatments covered eight of the nine career education goal statements. No treatments were developed to achieve goal statement 6, The Development of Good Work Habits and only one treatment was developed to achieve goal statement 2, Increased Academic/Vocational Skills. One or more of the target schools implemented each of the 36 general treatments.

Each of the target schools was asked to identify those general treatments it was trying to implement. The list of general treatments and the list of target schools that eventually implemented the general treatments are presented by Career Education Goal Statement in Table 2. The same information is presented in more detail in the Revised Treatment Group-Outcome Area Table presented in Appendix 1. A summary of the evaluation design, which also identifies those career education target schools accountable for each outcome, is found in Appendix 2.

The Revised Treatment Group-Outcome Area Table differs from the original Treatment Group Outcome Area Table in that the original table was based on the school plans and reflected what the schools intended to do in the area of Career Education. The revised table is based on the end-of-year analysis of what activities actually were implemented during the year. For the most part the career education activities planned were implemented. There were, however, exceptions. End of year reports of implementation status were submitted for six of the ten career education target schools. The six schools submitting reports included one elementary school, two junior high schools, and three senior high schools. The career education target schools included one elementary school, two junior high schools, three high schools, a combination elementary-junior high school and a combination junior-senior high school. The elementary school reported that it actually implemented seven of the eight general career education treatments identified in its education plan. The two junior high schools reported implementing 28 of 30 or 93% of the planned career education treatments. In addition, the junior high schools reported that they actually implemented four career education activities that were not included in their original plans. The three senior high schools reported implementing 46 of 54 or 85% of the planned activities and one activity that was not included in the original plans.

The implementation data provided by the six schools also included descriptions of specific activities that constituted implementation of general treatments. The specific activity descriptions included information

---

[2]August 15, 1974, edition, pages 6-8.

TABLE 2

General Educational Treatments Incorporated Into The Lincoln Career Education Program By Goal Statement By School

I. STUDENTS WILL DEMONSTRATE INCREASED SELF AWARENESS.

Treatments:	Schools:
1. Infusion of activities into existing curriculum directed toward assisting students to discover their own interests and abilities in terms of careers.	Goodrich, Mickle, East, Lincoln High, Northeast
2. Infusion of activities into learning resource centers directed toward assisting students to discover their own interest and abilities in terms of careers.	Brownell
3. Use of the "Valuing Approach to Career Education."	Blessed Sacrament
4. Use of Project Discovery Program	Goodrich, Mickle
5. Use of "Vocational Exploration Group" Program.	East, Mickle, Northeast, Lincoln, Pius
6. A program of interest and aptitude testing with a mechanism of feed-back and guidance to students based on results.	East, Goodrich, Mickle, Blessed Sacrament
7. Student assessment center	Pius
8. Infusion of valuing activities in Teacher Advisor Program.	Pius
9. A program of interest and aptitude testing with a mechanism of feed-back and guidance to students based on results.	Lincoln High, East, Northeast, Pius
10. Interest and aptitude testing program with guidance/advisor assistance based on results.	East, Northeast, Pius
11. Infusion of activities into existing curriculum directed toward assisting students to discover what values effect career choice and to discover their own values.	Goodrich, Mickle

II. STUDENTS WILL DEMONSTRATE INCREASED COMPETENCY IN BASIC ACADEMIC/VOCATIONAL SKILLS.

Treatment:	Schools:
1. Infusion of activities into existing curriculum directed toward assisting students to understand the importance of basic skills to career entry and success.	East, Goodrich, Mickle

III. STUDENTS WILL DEMONSTRATE INCREASED AWARENESS OF WORK VALUES AND POSSESS A DESIRE TO ENGAGE IN PAID AND/OR UNPAID WORK.

Treatment:	Schools:
1. Infusion of activities into existing curriculum directed toward developing in students a positive attitude toward work and working.	Brownell, Goodrich, Northeast

III. Continued

Treatment:	Schools:
2. Infusion of Activities into learning resource centers directed toward developing in students a positive attitude toward work and working.	Brownell, Lincoln High
3. Use of the "valuing Approach to Career Education."	Blessed Sacrament
4. Infusion of activities into existing curriculum directed toward assisting students to understand the importance of basic skills to career entry and success.	East, Northeast, Lincoln High

IV. STUDENTS WILL DEMONSTRATE INCREASED AWARENESS OF AND KNOWLEDGE ABOUT WORK.

Treatment:	Schools:
1. Infusion of activities into existing curriculum directed toward providing students an awareness of careers.	Brownell, East, Goodrich, Mickle, Northeast, Lincoln High
2. Use of Career Education field trips directed towards providing students an awareness of various careers.	Brownell, Blessed Sacrament, East, Goodrich, Mickle, Northeast, Lincoln High.
3. Use of Career Education resource speakers directed toward providing students an awareness of various careers.	Brownell, Blessed Sacrament, East, Goodrich, Mickle, Northeast, Lincoln High, Pius
4. Infusion of activities into learning resource centers directed toward providing students an awareness of various careers.	Brownell
5. Use of "Career Day" directed toward providing an awareness of various careers.	Northeast
6. Infusion of activities into existing curriculum directed toward assisting students to discover what values effect career choice and to discover their own values.	Goodrich, Mickle
7. Infusion of activities into existing curriculum directed toward assisting students to understand the importance of basic skills to career entry and success.	Northeast, Lincoln High, East, Goodrich, Mickle
8. Use of a specific program of preparation and follow-up directed towards providing students community based experience of indepth study of selected careers.	Goodrich, Mickle, Pius
9. Infusion of activities into existing curriculum directed toward providing hands on experience in job tasks of selected careers.	East
10. Infusion of career information into "Individualized Industrial Arts Program."	Goodrich
11. Use of the "World of Construction Program."	East, Goodrich, Mickle
12. Use of the World of Manufacturing Program."	Goodrich, Mickle
13. Use of the "Project Discovery Program."	Goodrich, Mickle

IV. Continued

Treatment:	Schools:
14. Career Information Centers directed toward providing students an awareness of various careers.	East, Northeast, Pius
15. Use of Career Information Centers to provide students with in-depth information about careers including such items as pay, working hours, entry level criteria, etc.	East, Northeast, Lincoln High, Pius

V. STUDENTS WILL DEMONSTRATE INCREASED COMPETENCY IN CAREER DECISION-MAKING SKILLS.

Treatment:	Schools:
1. Infusion of activities into existing curriculum directed toward assisting students to discover their own interests and abilities in terms of careers.	Goodrich, Mickle, East, Lincoln High, Northeast
2. Infusion of activities into learning resource centers directed toward assisting students to discover their own interest and abilities in terms of careers.	Brownell
3. Infusion of activities into existing curriculum directed toward assisting students to understand the relationship between skills taught in school and their application in various careers.	East, Goodrich, Mickle, Northeast, Lincoln High
4. Infusions of activities into existing curriculum directed toward developing in students basic career decision-making skills.	Goodrich, Mickle, East, Lincoln High
5. Use of "Vocational Exploration Group" Program.	East, Mickle, Northeast, Lincoln High, Pius
6. Student assessment center.	Pius
7. Infusion of activities into existing curriculum directed toward assisting students to discover what values affect career choice and to discover their own values.	East, Northeast, Lincoln High
8. Infusion of valuing activities in Teacher Advisor Program.	Pius

VI. STUDENTS WILL DEMONSTRATE GOOD WORK HABITS.

VII. STUDENTS WILL DEMONSTRATE WORK-SEEKING AND WORK-GETTING SKILLS.

Treatment:	Schools:
1. Provide students assistance in course selection based on their interests and abilities.	Goodrich
2. Use of "Vocational Exploration Group" Program.	Northeast, Lincoln High, East, Mickle, Pius
3. Co-op education programs.	East, Lincoln High
4. Paid and non-paid community placements.	East, Northeast, Lincoln High, Pius

VII. Continued

Treatment:	Schools:
5. Guidance/advisor assistance in course selection based on career interest aptitude and goals.	East, Northeast, Lincoln High, Pius

VIII. STUDENTS WHO ARE LEAVING THE FORMAL EDUCATION SYSTEM WILL BE SUCCESSFUL IN BEING PLACED IN A PAID OCCUPATION, IN FURTHER EDUCATION, OR IN UNPAID WORK THAT IS CONSISTENT WITH THEIR CURRENT CAREER EDUCATION.

Treatment:	Schools:
1. Exiting Placement Program	East, Northeast, Lincoln High, Pius

IX. STUDENTS WILL BE AWARE OF MEANS AVAILABLE FOR CONTINUED EDUCATION ONCE THEY HAVE LEFT THE FORMAL EDUCATIONAL SYSTEM.

Treatment:	Schools:
1. Exiting Placement Program.	East, Northeast, Lincoln High, Pius

about (a) who implemented the specific treatment (by title, not name), (b) how or what they did, and (c) the total number of students effected. Examples of specific career education activities are listed by level (elementary, junior high, and senior high) in Appendix 3, Summary of Implementation Information.

The activity descriptions provided by the schools vary considerably in level of generality and style. The descriptions include use of separate programs like "World of Construction" and "World of Manufacturing," or the "Vocational Exploration Program." They also include examples of classroom activities such as an English teacher using (a) a unit on linguistics organized around career possibilities, (b) role playing interviews for jobs to give students a better understanding of how individuals are selected for jobs. A more complete list is presented in Appendix 3.

An implementation questionnaire was also distributed to teachers in career education target schools. A copy of the questionnaire can be found in Appendix 4. The questionnaires were returned by 394 teachers. The survey covered both in-service in career education, and implementation of career education activities with students.

Three hundred eleven teachers or 79% reported that they had attended a career education in-service. Three fourths of the teachers reported that they had spent more than two hours in career education in-service. Fifty percent reported spending seven or more hours in career education and one-fourth reported spending nine or more hours in career education in-service. In a similar survey of 278 teachers in career education target schools conducted the previous year, only 42% reported participating in career education in-service.

Two hundred ninety or 74% of the responding teachers reported that they had planned and carried career education activities during the 1974-75 school year. Three fourths of the 290 teachers that had carried on career education activities reported that they carried on two or more activities. Fifty percent reported carrying out five activities and 25% reported carrying out 13 or more activities. Comparable information on the number of career education activities planned and carried out was not available for 1974.

Two hundred eighteen or 56% of the responding teachers reported that they had utilized resource persons from the community. Seventy five percent of the teachers that utilized resource teachers used two or more resource teachers. Fifty percent used four or more resource persons from the community and twenty-five percent used eleven or more resource persons. The previous year only 35% of the teachers reported that they had used career education resource persons. The number of resource persons that the teachers reported using doubled from 1973-74 when the teachers reported using approximately 450 resource persons to 1974-75 when the teachers reported using nearly 900 resource persons.

On the basis of the analysis of the career education implementation plans and the implementation report the following generalizations were made about career education in the Lincoln Public Schools:

1. The Lincoln Career Education Program has resulted in a significant increase in the amount and diversity of career information being made available to students. Smaller gains have been made in the area of career exploration, in actual career preparation and in career planning.

2. The Lincoln Career Education Program has resulted in the reclassification of classroom activities that have been used for years as Career Education activities. Consequently it is impossible to determine the exact extent of the impact of the project on target schools.
3. Based on the numbers of participants reported by schools for the 1973-74 and the 1974-75 school years, the following conclusions are warranted:
   (a) The Career Education Project has reached a significant number of students, and
   (b) The number of students reached increased significantly from 1973-74 to 1974-75.
4. The Lincoln Career Education Project has resulted in the increased use of planning as a means of systematic curriculum modification. Improvement plans were developed by all the career education target schools. In most cases the plans were implemented; however, as expected, implementation of the plans varied from school to school. In several of the schools the concept of planning was extended to the departmental level. In all cases the second year plans were superior to the first year plans.
5. The Career Education activities implemented in the elementary schools have been fairly comprehensive. Of particular significance is the "valuing" approach to career education. This procedure is being used systematically with all students on a continuing basis. The program has been effective. Summary student data is presented in Appendix 5. The career education activities in both the junior and senior high school have not been comprehension. Participation is not systematic but instead is determined by a number of "chance" factors, i.e., teacher assignments, advisors, etc.

QUESTION 3. What was the impact of the career education activities on students?

The procedures recommended in the *Handbook for the Evaluation of Career Education Programs* were used to estimate the impact of the Career Education program on students. One significant deviation from the recommended procedures was, however, necessary. The Lincoln Career Education Project focused on supporting change at the local school building level, therefore, the Career Education activities (treatments) varied from school to school. Each building developed plans to implement a unique program of Career Education Activities. Consequently, the specific activities implemented at a school could not be accurately estimated until well into the school year. Even then the schools were free to determine how and when the activities were implemented. The procedures, outlined in the Handbook, however, assumed that target students could be accurately identified at the beginning of the school year.

The rest of the procedures were followed. General Career Education treatments were identified. School plans were then reviewed to determine which schools planned to implement which treatments, the Treatment Group Outcome Area Table completed and the Outcome Question/Treatment Group Matrix completed. The Outcome Question/Treatment Group Matrix identifies the schools that because of the career education activities they implemented, should be accountable for each of 36 student outcomes. The Treatment Group Outcome Area table can be found in Appendix 1. The Revised Outcome Question/Treatment Group Matrix is presented in Appendix 6. The Outcome Question/Treatment Group Matrix in Appendix 6 is revised.

The central focus of the Lincoln Career Education Project as implemented were (a) an increased awareness of and knowledge about work and (b) increased career decision making skills. The Lincoln Career Education Project also focused more on secondary schools, junior high and senior high schools, than on elementary schools.

Two instruments were selected for use in the 1974-75 career education evaluation. Both reflected the project emphasis on secondary level students. The two selected instruments were the *Assessment of Career Development* (ACD) and the *Career Maturity Inventory* (CMI).

The ACD includes five subscores structured around three aspects of career education. The three are:

- "Occupational awareness including occupational knowledge and exploratory occupational experiences,
- "Self-awareness including job values and preferences, career plans, self-evaluation of career planning and perceived needs for help with career planning,
- "Career Planning and Decision Making including career planning, knowledge and involvement in Career Planning Exeriences."[3]

The five subscores are:

Subscore 1: Occupational characteristics
Subscore 2: Occupational Preparation Requirements
Subscore 3: Exploratory Occupational Exeriences[4]
Subscore 4: Career Planning Knowledge
Subscore 5: Career Planning Involvement

The CMI is constructed "to measure maturity of attitudes and competencies that are critical in realistic Career Making."[5] The test includes five separate subtests and an attitude scale. The five subtests are:

Part 1: Knowing Yourself (self-appraisal)
Part 2: Knowing About Jobs (Occupational Information)
Part 3: Choosing a Job (Goal Selection)
Part 4: Looking Ahead (Planning)
Part 5: What Should They Do (Problem Solving)

Part 5 was not recommended by a USOE review panel and therefore, was not incorporated into the Career Educational evaluation design. The correspondence between the subtests and subscore is summarized in Appendix 2: Evaluation Design.

The two instruments selected, the *Assessment of Career Development* and the *Career Maturity Inventory*, were subsequently administered at the 9th and 12th grades in all Career Education Target schools and in selected control schools. The three control schools selected at the junior high school level, 9th grade, were

---

[3]Assessment of Career Development Handbook Users Guide and Report of Research, page 1.
[4]A separate score is also provided for each six occupational clusters. (1) social, health and personal services, (2) business sales and management, (3) business operation, (4) technologies and trades, (5) natural, social and medical science, (6) creative and applied arts.
[5]Career Maturity Inventory, Administration and Use Manual, page 3

judged to be fairly representative of the four Career Education junior high schools. Only one control school was available at the senior high school level. The other four high schools in the city were Career Education target schools. Even then the control school was not judged to be a reasonable control for the four Career Education high schools. Many of the teachers from that high school participated in Career Education in-service and presumably implemented Career Education activities as a result.[6]

A rather complex matrix sampling plan was used to administer the two tests in both the Career Education and control schools, the sampling plan was developed and used to eliminate or at least alleviate staff concern about the amount of time to be spent testing students. The two tests selected, the ACD and CMI, require 230 minutes of actual testing time. The testing would take an additional 50-75 minutes to distribute and collect, read instructions, etc.

The sampling plan developed reduced testing time to a single 30 minutes testing period. The two tests were subdivided into eight subtests. Each student completed one of the subtests. There was one exception to this sampling arrangement. One school, because of a small enrollment, administered the test in two 30 minute periods. Each student at that particular school completed two of the eight subtests. The number of students responding to each subtest in each school is summarized in table form in Appendix 7.

The use of this sampling plan in the evaluation design had one serious shortcoming. Subsequent school by school analysis of the treatments revealed that treatments were not uniformly implemented within schools. A treatment consisted of one or more career education activities. Each career education effected one or more students. Rarely was any single activity designed to effect the entire school or even an entire grade level. More commonly the activities focused either on a particular classroom (one teacher and anywhere from 15 to 80 students), or a just part of a grade level (those 10th grades enrolled in a particular elective course).

Information on any one subtest was available for only 140-190 students. It was impossible to determine what percent of those students tests had participated in career education activities. The problem was not caused by the use of the sampling plan. If census testing had been conducted, each student took both tests in their entirety, the evaluator still would not have known which students participated in what career education activities. Instead what was needed was an accounting system to record each career education activity and identify the students that participated in that activity. Such a monitor system was beyond the scope of the evaluation. It is highly unlikely that such information could be reliable collected even if the resources, in terms of time and money, were available.

Analysis of the results was based on the outcome-instrument pairings in Table VI-A of the *Handbook for the Evaluation of Career Education Programs.*[7] The pairings discussed in this evaluation report are listed in Table 3.

---

[6]The senior high control school, although officially not a target school, had a career education staff member assigned to it on a one-half time basis. A full time staff member was assigned to each of the other three public high schools.

[7]August 15, 1974 edition, pages 64-66.

TABLE 3

Outcome-Instrument Pairings Utilized in 1974-1975 Career Education Evaluation

Junior High School

Outcome*			Instrument(s)		
IV	A	Duties and abilities required	(1)	ACD	Subscore 1
			(2)	ACD	Subscore 3
			(3)	CMI	Part 1
			(4)	CMI	Part 2
IV	B	Work conditions	(1)	ACD	Subscore 1
IV	C	Entry requirements	(1)	ACD	Subscore 2
			(2)	CMI	Part 4
IV	D	Impact of social and technological change	(1)	ACD	Subscore 4
IV	E	Factors affecting success and satisfaction	(1)	CMI	Part 1
V	A	Relating own abilities to work possibilities	(1)	CMI	Part 1
			(2)	CMI	Part 3
V	B	Relating own interests and value to work possibilities	(1)	ACD	Subscore 3
			(2)	CMI	Part 1
			(3)	CMI	Part 3
V	C	Awareness and use of information sources	(1)	ACD	Subscore 4
			(2)	ACD	Subscore 5
V	E	Steps and factors in career planning	(1)	ACD	Subscore 4
			(2)	CMI	Part 1
V	F	Active involvement in career decision making	(1)	ACD	Subscore 5

Senior High School

III	B	Positive attitudes toward work	(1)	CMI	Attitude Scale
IV	A	Duties and abilities required	(1)	ACD	Subscore 1
			(2)	ACD	Subscore 3
			(3)	CMI	Part 1
			(4)	CMI	Part 2
IV	B	Work conditions	(1)	ACD	Subscore 1
IV	C	Entry requirements	(1)	ACD	Subscore 2
			(2)	CMI	Part 4
IV	D	Impact of social and technological change	(1)	ACD	Subscore 4
IV	E	Factors affecting success and satisfaction	(1)	CMI	Part 1

V	A	Relating own abilities to work possibilities	(1)	CMI	Part 1
			(2)	CMI	Part 3
V	B	Relating own interests and value to work possibilities	(1)	ACD	Subscore 3
			(2)	CMI	Part 1
			(3)	CMI	Part 3
V	C	Awareness and use of information sources	(1)	ACD	Subscore 4
			(2)	ACD	Subscore 5
V	E	Steps and factors in career planning	(1)	ACD	Subscore 4
			(2)	CMI	Part 1
V	F	Active involvement in career decision making	(1)	ACD	Subscore 5
VII	A	Awareness and use of information	(1)	ACD	Subscore 5

*Numbering system and descriptions used in Draft Handbook for the Evaluation of Career Education Programs.

A separate analysis was run for each of the 22 student outcomes. The results of the analysis and the conclusions based on the analysis were similar for all 22 outcomes. Therefore, to simplify this report, the results are presented and discussed in four sections: Ninth grade results on the CMI, 12th grade results on the CMI, Ninth grade results on the ACD, and twelfth grade results on the ACD. The results are presented and discussed by student outcome for each of the 22 outcomes listed in Table 3 in Appendix 8.

Career Maturity Inventory: Ninth Grade

The ninth grade students in the four career education target schools scored higher than students in control schools on two of the four subtests on the Career Maturity Inventory. The students in the control schools scored higher on the other two subtests. None of the differences between the students in the Career Education target schools and the students in the control schools were statistically significant at the .05 level of confidence. The scores on all four subtests for both the career education schools and the control schools are summarized in Table 4.

TABLE 4

Comparison of Scores of Ninth Grade Students in Career Education Target Schools with Ninth Grade Students in Control Schools on all Four Subtests of the California Maturity Inventory

		Career Education	Control	Difference
PART 1:	Knowing Yourself (Self-appraisal)			
	Number of Students	98	69	Not
	Mean Score	13.31	13.20	Signifi-
	Standard Deviation	3.42	3.83	cant
PART 2:	Knowing About Jobs (Occupational Information)			
	Number of Students	92	67	Not
	Mean Score	14.97	15.22	Signifi-
	Standard Deviation	3.33	3.62	cant
PART 3:	Choosing a Job (Goal Selection)			
	Number of Students	96	70	Not
	Mean Score	12.97	12.54	Signifi-
	Standard Deviation	3.06	3.04	cant
PART 4:	Looking Ahead (Planning)			
	Number of Students	94	70	Not
	Mean Score	13.21	13.84	Signifi-
	Standard Deviation	3.65	3.15	cant

Although the scores of the Career Educa[illegible] 9th grade students were not higher than 9th grades in Lincoln control schools, they were higher than both national and Iowa State norms on all four subtests. The differences between the Lincoln means and the means of [illegible]owa norm group were statistically significant at the .01 level of confidence. The means of the national norm group were lower than the means of the Iowa norm group.

Career Maturity Inventory: Twelfth Grade

The students in the three[8] Career Education high schools scored higher than the control high school on two of the four subtests on the Career Maturity Inventory. The students in the control school scored higher on the other two tests. Again none of the differences were statistically significant at the .05 level of confidence. The scores on all four subtests for both the career education schools and the control school are summarized in Table 5.

---

[8]The scores of one senior high school were eliminated from the table because of problems encountered during the administration of the test.

TABLE 5

Comparison of Scores of Twelfth Grade Students in Career Education Target Schools with Twelfth Grade Students in Control Schools on all Four Subtests of the California Maturity Inventory

		Career Education	Control	Difference
PART 1:	Knowing Yourself (Self appraisal)			
	Number of Students	88	42	Not
	Mean Scores	13.66	13.81	Signifi-
	Standard Deviation	3.22	3.31	cant
PART 2:	Knowing About Jobs (Occupational Information)			
	Number of Students	87	45	Not
	Mean Scores	16.78	17.78	Signifi-
	Standard Deviation	2.88	2.52	cant
PART 3:	Choosing a Job (Goal Selection)			
	Number of Students	85	44	Not
	Mean Scores	14.09	13.59	Signifi-
	Standard Deviation	2.80	3.10	cant
PART 4:	Looking Ahead (Planning)			
	Number of Students	88	40	Not
	Mean Scores	13.94	13.18	Signifi-
	Standard Deviation	3.82	4.13	cant

The means of the Lincoln Career Education students were also compared with the mean scores of both national norm group and the Iowa norm group. The Lincoln students scored significantly higher ($p < .01$) than the Iowa norm group on two of the four subtests: Subtest 2 Knowing About Jobs and Subtest 4 Looking Ahead. The differences between the Lincoln Career Education and the Iowa norms on the other two subtests were not statistically significant.

The California Maturity Inventory Attitude Scale was also administered to the twelfth grade students in both the career education target schools and control schools. As with the means of the four competence tests of the CMI, the difference between the career education and control students was not statistically significant.[9] The mean of the Lincoln Career Education students was also compared with both the mean of the national norm group for 12th grade students and an Iowa norm for 12th grade students. The difference between the Lincoln mean and the national mean was not statistically significant, however, the Lincoln mean was significantly lower ($p < .01$) than the mean of the Iowa norm group.

[9]The mean of the career education schools on the attitude scale was 35.85 (standard deviation, 5.66) and the mean for the control school was 37.18 (standard deviation, 3.94).

Assessment of Career Development: Ninth Grade

Ninth grade students in the Lincoln Career Education Junior high schools scored lower than ninth grade students on all five subscores on the Assessment of Career Development. Only one of the differences, on Subscore 3 Exploratory Occupational Experiences, was statistically significant ($p < .05$). Subscore 3 is a self-report index of career related experience. Students in the control schools reported a mean score of 1.84 out of a possible score of 3.00 as compared with a mean score of 1.73 for students in the control schools. The scores on all five subtests for both the career education schools and the control schools are summarized in Table 6.

TABLE 6

Comparison of Scores of Ninth Grade Students in Career Education Target Schools with Ninth Grade Students in Control Schools on all Five Subscores of the Assessment of Career Development

	Career Education	Control	Difference
SUBSCORE 1: Occupational Characteristics			
Number of Students	87	66	
Mean Score	35.38	36.39	Not Signifi-
Standard Deviation	8.70	9.96	cant
SUBSCORE 2: Occupational Preparation Requirements			
Number of Students	87	66	
Mean Score	10.37	10.92	Not Signifi-
Standard Deviation	3.21	3.18	cant
SUBSCORE 3: Exploratory Occupations			
Number of Students	78	64	
Mean Score	1.73	1.84	
Standard Deviation	0.25	0.25	$p < .05$
SUBSCORE 4: Career Planning Knowledge			
Number of Students	84	65	
Mean Score	25.25	25.54	Not Signifi-
Standard Deviation	4.89	5.51	cant
SUBSCORE 5: Career Planning Involvement			
Number of Students	86	64	
Mean Score	1.71	1.75	Not Signifi-
Standard Deviation	0.36	0.35	cant

The scores of the students in the Lincoln Career Education schools were also compared with national norms. The Lincoln students scored as high or higher than the norm group on all five subtests. The difference between the Lincoln Career Education students and the norm group was significant only for Subscore 1 Knowledge of Occupational Characteristics.

Assessment of Career Development: Twelfth Grade

The twelfth grade students in Career Education target schools scored higher than students in the

control school on two subscores of the ACD. The students in the control school scored higher on the other three subscores. None of the differences between the students in the career education schools and the control schools were statistically significant at the .05 level of confidence. The scores on all five subtests for both career education schools and the control school are summarized in Table 7.

TABLE 7

Comparison of Scores on the Twelfth Grade Students in Career Education Target Schools with Twelfth grade Students in Control Schools on all Five Subscores of the Assessment of Career Development

	Career Education	Control	Difference
SUBSCORE 1: Occupational Characteristics			
Number of Students	80	41	Not
Mean Score	40.65	39.93	Signifi-
Standard Deviation	8.83	11.64	cant
SUBSCORE 2: Occupational Preparation Requirements			
Number of Students	80	41	Not
Mean Score	12.15	11.90	Signifi-
Standard Deviation	2.90	3.32	cant
SUBSCORE 3: Exploratory Occupational Experiences			
Number of Students	76	41	Not
Mean Scores	1.78	1.79	Signifi-
Standard Deviation	0.27	0.29	cant
SUBSCORE 4: Career Planning Knowledge			
Number of Students	83	42	Not
Mean Score	27.29	27.93	signifi-
Standard Deviation	5.60	4.59	cant
SUBSCORE 5: Career Planning Involvement			
Number of Students	79	40	Not
Mean Score	1.93	2.04	Signifi-
Standard Deviation	0.38	0.34	cant

The ACD was designed for use with grades 8-11, therefore, National Norms were not available for 12th grade students.

Discussion of Student Outcome

The general conclusion to be drawn from the comparison of Lincoln career education students with control students on both the ACD and the CMI is that there is no significant differences between the two groups. Nineteen tests of significance were computed; one for each subtest or score on both the CMI and the ACD for both 9th grade and 12th grade students, and the CMI Attitude Test for 12th grade students only. In only one of the nineteen was the difference between the two groups statistically significant. On that particular comparison, subscore 3 of the ACD for 9th grade students favored the students in the control schools. Subscore 3 of the ACD was not school related; it involved self report of occupationally related experiences. It was used as an evaluation of two student outcomes:

(1) IV-A: Have students increased their knowledge regarding the major duties and required abilities of different types of paid and unpaid work?

(2) V-B: Have students increased their ability to related their personal interests and values to types of paid and unpaid work and their associated life styles?

In neither instance was subscore 3 of the ACD the only score used to evaluate the outcome. For outcome IV-A, Subscore 3 was combined with Subscore 1 of the ACD and Parts 1 and 2 of the CMI. For outcome V-B, Subscore 3 was combined with Part 1 and Part 3 of the CMI. The differences between career education and control school on these scores were not statistically significant. The Career Education students actually scored higher on two of the four measures. Therefore, it is very likely that the statistically significant finding on Subscore 3 is more a product of chance factors than a meaningful difference between the two groups.

CONCLUSIONS AND RECOMMENDATIONS

Conclusions.

The following conclusion regarding the Lincoln Career Education project seems to be warranted based on the analysis of information associated with the three evaluation questions:

1. The Lincoln Career Education Project has successfully achieved or is making progress toward, most of product objectives specified in the original grant document as modified in the continuation proposal. Many of the original objectives are no longer appropriate as *written* however the *intent* is still appropriate.
2. The Lincoln Career Education Project has resulted in a significant increase in the number of career education activities within the schools. Both the number of activities and the number of students that participated in career education activities increased markedly from 1973-74 to 1974-75.
3. The Lincoln Career Education Project did not have a measurable impact on student outcomes as measured by the *Assessment of Career Development* and the *Career Maturity Inventory*. The 1974-75 evaluation design focused on twenty-two Student Outcomes. Comparisons were made between Lincoln students from Career Education target schools with Lincoln students from control schools. Nineteen different measures were used to make the 22 comparisons. The differences between the two groups were not significant on any of the 22 comparisons. There was, however, a statistically significant difference on one of the 19 measures, Subscore 3 of the ACD. The subscore was used only in combination with four other subscores to assess two student outcomes. Since the differences between means on the other four subscores were not significant the importance of the one significant difference is questionable.
4. Although there were no significant differences between students in the Lincoln career education target schools and students in control schools, the Lincoln career education students tended to score as high or higher than both national and regional norm groups, particularly on the CMI. The one noticeable exception to this trend was the attitude score on the CMI. The mean score of regional norm group was signficantly higher than the Lincoln mean.

5. The Lincoln Career Education Project resulted in the increased use of planning as a means of systematic curriculum modification. Improvement plans were developed by all career education target schools. In most cases the plans were implemented, however, as expected implementation varied from school to school. In all cases the second year plans were superior and more useful than the first year plans.

Recommendations:

Based on the above conclusion and on the analysis of information associated with the three evaluation questions the following recommendations are submitted for consideration.

1. More attention needs to be given to developing a comprehensive delivery system for career education activities, particularly at the secondary level. Participation in career education activities at the secondary level is presently determined more by chance factors than by student need. A plan needs to be developed to insure that all secondary students participate in career education at some minimal level. The elementary career education activities appear to be more comprehensive in that all students are participating on a continuing basis; particularly in the "valuing" approach to career education.
2. Continuing attention needs to be given to standardizing and coordinating the planning activities being used at the local school level. The plans developed last year were so diverse in both form and language that they were impossible to deal with on other than an individual basis. These inconsistencies make it very difficult to determine the accumulative impact of the project on the district.
3. The evaluation design needs to be modified. The present design, as implemented, fails to take into consideration several factors that could account for the lack of significant findings. First, data regarding student outcomes was collected on a sampling basis. Participation of students, however was not universal within schools. Not all students participated in the career education activities and those that did participate did not participate in the same activities. Participation varied from school to school and from individual to individual depending on activities planned, the student schedules and teacher initiative. It was therefore impossible to determine either a priori or (without detailed records) a posteri which students participated in what activities. Consequently, it was impossible to determine how the experimental and control students should differ. A second factor was the lack of baseline information on which to make comparisons. A third factor was the lack of satisfactory control schools at the senior high school level and a fourth factor was the nature of the career education project. Control schools were not precluded from implementing career education activities and implementation was not mandated in career education schools.

   In fact a member of the career education project was actually assigned to work with staff of the control high school on a part time basis.

   Modifications to be considered in next year's evaluation design should be (1) the abandonment of the use of sampling in the career education target schools, and (2) the development and use of a detailed coding system to determine which students participate in which career education activities.

Appendix 1

Treatment Group Outcome Area Table

TREATMENT GROUP OUTCOME AREA TABLE

ELEMENTARY FAMILIARIZATION

INCREASED AWARENESS OF AND KNOWLEDGE ABOUT WORK

IV. A. Students have increased their knowledge regarding the major duties and required abilities of different types of paid and unpaid work.
B. Students have increased their knowledge of differences in work conditions and life styles associated with different types of paid and unpaid work.
C. Students have increased their knowledge of entry requirements for major types of paid and unpaid work.
D. Students have increased their knowledge of the impact of social and technological change in paid and unpaid work.
E. Students have increased their knowledge of the important factors that affect work success and satisfaction.

Treatments:	Brownell	Blessed Sacrament
1. Infusion of activities into existing curriculum directed toward providing students an awareness of careers.	X	
2. Use of Career Education field trips directed towards providing students an awareness of various careers.	X	X
3. Use of Career Education resource speakers directed toward providing students an awareness of various careers.	X	X
4. Infusion of activities into learning resource centers directed toward providing students an awareness of various careers.	X	

INCREASED SELF-AWARENESS AND INCREASED CAREER DECISION-MAKING SKILLS

I. A. Students have increased their ability to describe their own current abilities and limitations.
B. Students have increased their ability to describe their own current interest and values.

V. A. Students have increased their ability to associate their own abilities and limitations with possible success in present or future paid and unpaid work.
B. Students have increased their ability to relate their personal interests and values to types of paid and unpaid work and their associated life-styles.

Treatments:	Brownell	Blessed Sacrament
1. Infusion of activities into existing curriculum directed toward assisting students to discover their own interests and abilities in terms of careers.	X	
2. Infusion of activities into learning resource centers directed toward assisting students to discover their own interest and abilities in terms of careers.	X	

ELEMENTARY ORIENTATION

INCREASED DESIRE TO ENGAGE IN PAID AND/OR UNPAID WORK

III. B. Students possess more positive attitudes toward paid and unpaid work.

Treatments:	Brownell	Blessed Sacrament
1. Infusion of activities into existing curriculum directed toward developing in students a positive attitude toward work and working.	X	
2. Infusion of activities into learning resource centers directed toward developing in students a positive attitude toward work and working.	X	

INCREASED SELF-AWARENESS AND INCREASED AWARENESS OF WORK VALUES

I. B. Students have increased their ability to describe their own current interest and values.

III. A. Students have increased their recognition of the bases of various work values.

Treatments:	Brownell	Blessed Sacrament
1. Use of the "Valuing Approach to Career Education"		X

JUNIOR HIGH FAMILIARIZATION

INCREASED AWARENESS OF AND KNOWLEDGE ABOUT WORK

IV. A. Students have increased their knowledge regarding the major duties and required abilities of different types of paid and unpaid work.
B. Students have increased their knowledge of differences in work conditions and life styles associated with different types of paid and unpaid work.
C. Students increased their knowledge of entry requirements for major types of paid and unpaid work.
D. Students have increased their knowledge of the impact of social and technological change in paid and unpaid work.
E. Students have increased their knowledge of the important factors that affect work success and satisfaction.

Treatments:	East	Goodrich	Mickle	Blessed Sacrament
1. Infusions of activities into existing curriculum directed toward providing students an awareness of various careers.	X	X		
2. Use of Career Education field trips directed toward providing students an awareness of various careers.	X	X	X	X
3. Use of Career Education resource speakers directed toward providing students an awareness of various careers.	X	X	X	X
4. Use of "Career Day" directed toward providing an awareness of various careers.			X	

INCREASED SELF-AWARENESS AND INCREASED CAREER DECISION-MAKING SKILLS

I. A. Students have increased their ability to describe their own current abilities and limitations.
B. Students have increased their ability to describe their own current interest and values.

V. A. Students have increased their ability to associate their own abilities and limitations with possible success in present or future paid and unpaid work.
B. Students have increased their ability to relate their personal interests and values to types of paid and unpaid work and their associated life-styles.

Treatments:	East	Goodrich	Mickle	Blessed Sacrament
1. Infusion of activities into existing curriculum directed toward assisting students to discover their own interests and abilities in terms of careers.		X	X	

JUNIOR HIGH ORIENTATION

INCREASED SELF-AWARENESS AND INCREASED AWARENESS OF WORK VALUES

I. B. Students have increased their ability to describe their own current interest and values.

III. A. Students have increased their recognition of the bases of various work values.

Treatments:	East	Goodrich	Mickle	Blessed Sacrament
1. Use of the "Valuing Approach to Career Education"				X

INCREASED DESIRE TO ENGAGE IN PAID AND/OR UNPAID WORK

III. B. Students possess more positive attitudes toward paid and unpaid work.

Treatments:	East	Goodrich	Mickle	Blessed Sacrament
1. Infusion of activities into existing curriculum directed towards developing in students a more positive attitude toward work and working.		X		

INCREASED SELF-AWARENESS AND INCREASED CAREER DECISION-MAKING SKILLS

I. B. Students have increased their ability to describe their own current interest and values.

IV. B. Students have increased their ability to relate their personal interests and values to types of paid and unpaid work and their associated life-styles

Treatments:	East	Goodrich	Mickle	Blessed Sacrament
1. Infusion of activities into existing curriculum directed toward assisting students to discover what values effect career choice and to discover their own values.		X	X	

INCREASED BASIC ACADEMIC/VOCATIONAL SKILLS AND INCREASED AWARENESS OF AND KNOWLEDGE ABOUT WORK

II. A. Students have increased their level of generally useful numerical skills.
B. Students have increased their level of generally useful communication skills.

IV. E. Students have increased their knowledge of the important factors that affect work success and satisfaction.

Treatments:	East	Goodrich	Mickle	Blessed Sacrament
1. Infusion of activities into existing curriculum directed toward assisting students to understand the importance of basic skills to career entry and success.	X	X	X	

INCREASED CAREER DECISION-MAKING SKILLS

V. A. Students have increased their ability to associate their own abilities and limitations with possible success in present or future paid and unpaid work.

Treatments:	East	Goodrich	Mickle	Blessed Sacrament
1. Infusion of activities into existing curriculum directed toward assisting students to understand the relationship between skills taught in school and their application in various careers.	X	X	X	

INCREASED CAREER DECISION-MAKING SKILLS

V. A. Students have increased their ability to associate their own abilities and limitations with possible success in present or future paid and unpaid work.
B. Students have increased their ability to relate their personal interests and values to types of paid and unpaid work and their associated life-styles.
C. Students have increased their ability to (a) identify, (b) locate, and (c) utilize sources of information to solve career decision-making problems.
D. Students have increased their ability to determine the potential for future advancement/personal growth in work of their choosing.
E. Students have increased their knowledge of the steps to be taken and the factors to be considered in career planning.
F. Students have increased their active involvement in career decision-making.

Treatments:	East	Goodrich	Mickle	Blessed Sacrament
1. Infusions of activities into existing curriculum directed toward developing in students basic career decision-making skills.		X		

INCREASED WORK SEEKING AND WORK GETTING SKILLS

VII. B. Students have increased their level of skills required in (a) applying for, and (b) accepting work.

Treatments:	East	Goodrich	Mickle	Blessed Sacrament
1. Provide students assistance in course selection based on their interests and abilities.		X		

JUNIOR HIGH EXPLORATION

INCREASED AWARENESS OF AND KNOWLEDGE ABOUT WORK

IV. A. Students have increased their knowledge regarding the major duties and required abilities of different types of paid and unpaid work.
B. Students have increased their knowledge of differences in work conditions and life styles associated with different types of paid and unpaid work.
C. Students have increased their knowledge of entry requirements for major types of paid and unpaid work.
D. Students have increased their knowledge of the impact of social and technological change in paid and unpaid work.
E. Students have increased their knowledge of the important factors that affect work success and satisfaction.

Treatments:	East	Goodrich	Mickle	Blessed Sacrament
1. Use of a specific program of preparation and follow-up directed towards providing students community based experience of indepth study of selected careers.		X	X	
2. Infusion of activities into existing curriculum directed toward providing hands on experience in job tasks of selected careers	X		X	
3. Infusion of career information into "Individualized Industrial Arts Program"		X		
4. Use of the "World of Construction Program"	X	X	X	
5. Use of the "World of Manufacturing Program"		X	X	

INCREASED SELF–AWARENESS AND INCREASED AWARENESS OF AND KNOWLEDGE ABOUT WORK

I. A. Students have increased their ability to describe their own current abilities and limitations.

B. Students have increased their ability to describe their own current interest and values.

IV. A. Students have increased their knowledge regarding the major duties and required abilities of different types of paid and unpaid work.

B. Students have increased their knowledge of differences in work conditions and life styles associated with different types of paid and unpaid work.

C. Students have increased their knowledge of entry requirements for major types of paid and unpaid work.

D. Students have increased their knowledge of the impact of social and technological change in paid and unpaid work.

E. Students have increased their knowledge of the important factors that affect work success and satisfaction.

Treatments:	East	Goodrich	Mickle	Blessed Sacrament
1. Use of the Project Discovery Program.		X		

INCREASED SELF-AWARENESS, INCREASED CAREER DECISION-MAKING SKILLS AND INCREASED WORK SEEKING AND WORK GETTING SKILLS

I. A. Students have increased their ability to describe their own current abilities and limitations.

B. Students have increased their ability to describe their own current interest and values.

V. A. Students have increased their ability to associate their own abilities and limitations with possible success in present or future paid and unpaid work.

B. Students have increased their ability to relate their personal interests and values to types of paid and unpaid work and their associated life-styles.

C. Students have increased their ability to (a) identify, (b) locate, and (c) utilize sources of information to solve career decision-making problems.

D. Students have increased their ability to determine the potential for future advancement/personal growth in work of their choosing.

E. Students have increased their knowledge of the steps to be taken and the factors to be considered in career planning.

VII. A. Students have increased their ability to (a) identify, (b) locate, and (c) utilize sources that contain information about paid and unpaid work.

Treatments:	East	Goodrich	Mickle	Blessed Sacrament
1. Use of "Vocational Exploration Group" Program	X		X	

INCREASED SELF-AWARENESS

I. A. Students have increased their ability to describe their own current abilities and limitations.
B. Students have increased their ability to describe their own current interest and values.

Treatments:	East	Goodrich	Mickle	Blessed Sacrament
1. A program of interest and aptitude testing with a mechanism of feed-back and guidance to students based on results.	X	X	X	X

SENIOR HIGH FAMILIARIZATION

INCREASED AWARENESS OF AND KNOWLEDGE ABOUT WORK

IV. A. Students have increased their knowledge regarding the major duties and required abilities of different types of paid and unpaid work.
B. Students have increased their knowledge of differences in work conditions and life styles associated with different types of paid and unpaid work.
C. Students have increased their knowledge of entry requirements for major types of paid and unpaid work.
D. Students have increased their knowledge of the impact of social and technological change in paid and unpaid work.
E. Students have increased their knowledge of the important factors that affect work success and satisfaction.

Treatments:	East	Northeast	Lincoln High	Pius
1. Infusion of activities into existing curriculum directed toward providing students an awareness of various careers.	X	X	X	
2. Use of Career Day directed toward providing students an awareness of various careers.		X	X	
3. Career Information Centers directed toward providing students an awareness of various careers.	X	X	X	X
4. Use of Career Education field trips directed toward providing students an awareness of various careers.	X	X	X	X
5. Use of Career Education Resource speakers directed toward providing students an awareness of various careers.	X	X	X	X

INCREASED SELF-AWARENESS AND INCREASED CAREER DECISION-MAKING SKILLS

I. A. Students have increased their ability to describe their own current abilities and limitations.
B. Students have increased their ability to describe their own current interest and values.

V. A. Students have increased their ability to associate their own abilities and limitations with possible success in present or future paid and unpaid work.
B. Students have increased their ability to relate their personal interests and values to types of paid and unpaid work and their associated life-styles.

Treatments:	East	Northeast	Lincoln High	Pius
1. Infusion of activities into existing curriculum directed toward assisting students to discover their own interests and abilities in terms of careers.	X		X	X
2. Student assessment center			X	

SENIOR HIGH ORIENTATION

INCREASED SELF-AWARENESS AND INCREASED CAREER DECISION-MAKING SKILLS

I. B. Students have increased their ability to describe their own current interest and values.

V. B. Students have increased their ability to relate their personal interests and values to types of paid and unpaid work and their associated life-styles.

Treatments:	East	Northeast	Lincoln High	Pius
1. Infusion of activities into existing curriculum directed toward assisting students to discover what values affect career choice and to discover their own values.	X	X	X	X
2. Infusion of valuing activities in Teacher Advisor Program				X

INCREASED CAREER DECISION-MAKING SKILLS

V. A. Students have increased their ability to associate their own abilities and limitations with possible success in present or future paid and unpaid work.

Treatments:	East	Northeast	Lincoln High	Pius
1. Infusion of activities into existing curriculum directed toward assisting students to understand the relationship between skills taught in school and their application in various careers.	X	X	X	

INCREASED AWARENESS OF WORK VALUES, INCREASED DESIRE TO ENGAGE IN PAID AND/OR UNPAID WORK AND INCREASED AWARENESS OF AND KNOWLEDGE ABOUT WORK

III. A. Students have increased their recognition of the bases of various work values.
B. Students possess more positive attitudes toward paid and unpaid work.

IV. E. Students have increased their knowledge of the important factors that affect work success and satisfaction.

Treatments:	East	Northeast	Lincoln High	Pius
1. Infusion of activities into existing curriculum directed toward assisting students to understand the importance of basic skills to career entry and success.	X	X	X	X

INCREASED CAREER DECISION-MAKING SKILLS

V. A. Students have increased their ability to associate their own abilities and limitations with possible success in present or future paid and unpaid work.
B. Students have increased their ability to relate their personal interests and values to types of paid and unpaid work and their associated life-styles.
C. Students have increased their ability to (a) identify, (b) locate, and (c) utilize sources of information to solve career decision-making problems.
D. Students have increased their ability to determine the potential for future advancement/personal growth in work of their choosing.
E. Students have increased their knowledge of the steps to be taken and the factors to be considered in career planning.
F. Students have increased their active involvement in career decision-making.

Treatments:	East	Northeast	Lincoln High	Pius
1. Infusion of activities into existing curriculum directed toward developing in students basic career decision-making skills.	X		X	

INCREASED DESIRE TO ENGAGE IN PAID AND/OR UNPAID WORK

III. B. Students possess more positive attitudes toward paid and unpaid work.

Treatments:	East	Northeast	Lincoln High	Pius
1. Infusion of activities into existing curriculum directed towards developing in students a positive attitude toward work and working.		X		
2. Infusion of activities into group guidance classes directed toward developing in students a positive attitude toward work and working.			X	

SENIOR HIGH EXPLORATION

INCREASED AWARENESS OF AND KNOWLEDGE ABOUT WORK

IV. A. Students have increased their knowledge regarding the major duties and required abilities of different types of paid and unpaid work.
B. Students have increased their knowledge of differences in work conditions and life styles associated with different types of paid and unpaid work.
C. Students have increased their knowledge of entry requirements for major types of paid and unpaid work.
D. Students have increased their knowledge of the impact of social and technological change in paid and unpaid work.
E. Students have increased their knowledge of the important factors that affect work success and satisfaction.

Treatments:	East	Northeast	Lincoln High	Pius
1. Use of a specific program of preparation and follow-up directed towards providing students community based experience of in-depth study of selected careers.				X
2. Use of Career Information Centers to provide students with in-depth information about careers including such items as pay, working hours, entry level criteria, etc.	X	X	X	X

INCREASED SELF-AWARENESS

I. A. Students have increased their ability to describe their own current abilities and limitations.
B. Students have increased their ability to describe their own current interest and values.

Treatments:	East	Northeast	Lincoln High	Pius
1. A program of interest and aptitude testing with a mechanism of feed-back and guidance to students based on results.	X	X	X	X

INCREASED WORK SEEKING AND WORK GETTING SKILLS

VII. B. Students have increased their level of skills required in (a) applying for, and (b) accepting work.

Treatments:	East	Northeast	Lincoln High	Pius
1. Individual Instructional Packets geared to student interest and aptitudes.		X		
2. Individual Instructional Packets geared to entry level criteria of various occupations, education or training programs		X		

INCREASED SELF-AWARENESS, INCREASED CAREER DECISION-MAKING SKILLS AND INCREASED WORK SEEKING AND WORK GETTING SKILLS

I. A. Students have increased their ability to describe their own current abilities and limitations.
B. Students have increased their ability to describe their own current interest and values.

V. A. Students have increased their ability to associate their own abilities and limitations with possible success in present or future paid and unpaid work.
B. Students have increased their ability to relate their personal interests and values to types of paid and unpaid work and their associated life-styles.
C. Students have increased their ability to (a) identify, (b) locate, and (c) utilize sources of information to solve career decision-making problems.
D. Students have increased their ability to determine the potential for future advancement/personal growth in work of their choosing.
E. Students have increased their knowledge of the steps to be taken and the factors to be considered in career planning.

VII. A. Students have increased their ability to (a) identify, (b) locate, and (c) utilize sources that contain information about paid and unpaid work.

Treatments:	East	Northeast	Lincoln High	Pius
1. Use of "Vocational Exploration Group" Program	X	X	X	X

SENIOR HIGH PREPARATION

INCREASED WORK SEEKING AND WORK GETTING SKILLS

VII. B. Students have increased their level of skills required in (a) applying for, and (b) accepting work.

Treatments:	East	Northeast	Lincoln High	Pius
1. Co-op education programs	X		X	
2. Paid and non-paid community placements	X	X	X	X

SENIOR HIGH EXITING PLACEMENT

PLACEMENT AND INCREASED AWARENESS OF MEANS FOR CONTINUED EDUCATION

VIII. A. Students have been place or are engaged in further education.
B. Students have been placed in a paid occupation.
C. Of those placed in (a) further education, and (b) employment, students consider the placement to be consistent with their career plans.
D. Of those not placed in further education or in a paid occupation, students are engaged in (a) unpaid work consistent with their career plans.

IX. A. Students have increased their ability to identify sources of additional education in major types of paid and unpaid work.
B. Students have increased their ability to identify means to support additional education for themselves in major types of paid and unpaid work.

Treatments:	East	Northeast	Lincoln High	Pius
1. Exiting Placement Program	X	X	X	X

CAREER PLANNING

INCREASED WORK SEEKING AND WORK GETTING SKILLS

VII. B. Students have increased their level of skills required in (a) applying for, and (b) accepting work.

Treatments:	East	Northeast	Lincoln High	Pius
1. Guidance/advisor assistance in course selection based on career interest aptitude and goals	X	X	X	X

INCREASED SELF-AWARENESS

I. A. Students have increased their ability to describe their own current abilities and limitations.
B. Students have increased their ability to describe their own current interest and values.

Treatments:	East	Northeast	Lincoln High	Pius
1. Interest and aptitude testing program with guidance/advisor assistance based on results.	X	X	X	X

INCREASED CAREER DECISION-MAKING SKILLS AND INCREASED AWARENESS OF MEANS FOR CONTINUED EDUCATION

V. A. Students have increased their ability to associate their own abilities and limitations with possible success in present or future paid and unpaid work.
B. Students have increased their ability to relate their personal interests and values to types of paid and unpaid work and their associated life-styles.
C. Students have increased their ability to (a) identify, (b) locate, and (c) utilize sources of information to solve career decision-making problems.
D. Students have increased their ability to determine the potential for future advancement/personal growth in work of their choosing.
E. Students have increased their knowledge of the steps to be taken and the factors to be considered in career planning.
F. Students have increased their active involvement in career decision-making.

IX. A. Students have increased their ability to identify sources of additional education in major types of paid and unpaid work.
B. Students have increased their ability to identify means to support additional education for themselves in major types of paid and unpaid work.

Treatments:	East	Northeast	Lincoln High	Pius
1. Program for post high school planning for use with graduating seniors and early exiting students.			X	

Appendix 2

Summary of Evaluation Design

EVALUATION DESIGN WORKSHEET

GOAL	LEVEL	PROJ.	Non-PROJ.	INSTRUMENT	SUBSCALE	SAMPLE
I. Self Awareness	3	A		None		
		B		None		
			C	*Self observation scale	1,2,4	BS, B
	6	A		None		
		B		None		
			C	*Self observation scale	1,2,3,4,7	BS, B, G
	9	A		None		
		B		None		
III. Work Values	12	A		None		
		B		CMI-ATT	Total	E, NE, LH, P
IV. Knowledge	3	A		*CEO	Total	B, BS
		B		*CEO	Total	B, BS
		C		None		
		D		None		
		E		None		
	6	A		*CEO	Total	B, BS, G
		B		*CEO	Total	B, BS, G
		C		*CEO	Total	B, BS, G
		D		None		
		E		None		
	9	A		ACD CMI	1, 3 1, 2	E, P, M, G
		B		ACD	1	E, P, M, G
		C		ACD CMI	2 4	E, P, M, G
		D		ACD	4	E, P, M, G
		E		CMI	1	E, P, M, G
	12	A		ACD CMI	1, 3 1, 2	E, P, NE, LH
		B		ACD	1	E, P, NE, LH
		C		ACD CMI	2 4	E, P, NE, LH
		D		ACD	4	E, P, NE, LH
		E		CMI	1	E, P, NE, LH
V. Decision Making Skills	9	A		CMI ACD	1,3 3	E, G, M, P
		B		CMI	1,3	G, M, P
		C		ACD	4,5	G, P
		D		None		
		E		ACD CMI	4 1	G, P
		F		ACD	5	G, P
	12	A		CMI ACD	1,3 3	E, NE, LH, P
		B		CMI	1,3	E, NE, LH, P
		C		ACD	4,5	E, NE, LH, P
		D		None		
		E		ACD CMI	4 1	E, NE, LH, P
		F		ACD	5	E, NE, LH, P
VII. Work Seeking Skills	12	A		ACD	5	E, NE, LH, P
		B		None		
VIII. Placement				LPS Follow-up survey		
Job Opportunities	either 12 or 10-12			Lincoln PS Survey	Selected Items	E, P, NE, LH
Financial	K-3 4-6 7-9 10-12			N.A.	N.A.	N.A.

*Not to be administered during 1974-75 school year.

E = East
NE = Northeast
LH = Lincoln High
P = Pius
G = Goodrich
M = Mickle
BS = Blessed Sacrament
B = Brownell

Appendix 3

Implementation Summary

APPENDIX 3

IMPLEMENTATION SUMMARY

A List of Specific Career Education Activities by General Treatment Classification by Goal Area*

I. Increased Self-Awareness and Increased Career Decision Making Skills

A. Infusion of activities into existing curriculum directed toward assisting students to discover their own interests and abilities in terms of careers.

1. In 8th grade Basic Studies students take Industrial and Environmental Units.
2. In World of Manufacturing, students are shown abilities in manufacturing and construction.
3. In World of Construction, students are shown abilities in construction and manufacturing.
4. In 7th grade Basic Studies students are shown travels, advertising, maps and activity cards.
5. Self Esteem test was given to some students.
6. For the reading students, individual conferences, book selections were given.
7. The 6-9th grade Instrumental classes gave performances for the public.
8. The 8th grade Basic Studies class had job interview activities, interest survey--Project Discovery.
9. The 6-7th grade Basic Studies classes conferenced with each student. Personal interviews were done by students. Many forms were filled out.
10. The 6-9th grade classes talked about goals, interests, abilities and test results.
11. The 6-9th grade students were given questionnaires in T/A, and all grades were given the T/A survey.
12. The 8-9th grades had individual conferences with art students who might be considering careers in art.
13. The 9th grade English class had planning sessions with students, Decision-making.
14. Sr. High English classes had filmstrips on careers; use of careers listing for library unit; worksheets and class discussion.
15. Sr. High Math classes had involvement informally in senior classes.
16. Sr. High Business classes had readings on careers; readings on job descriptions; readings on Labor Dept statistics; and complete units on major office duties.
17. Sr. High Social Studies classes had involvement in Economics, Psych, Business Law, Current Problems and EPIC Volunteer assignments.
18. Sr. High Home Economics classes were involved in HERO; Values Clarification activities; preview of jobs; qualifications; tests of their abilities.

*Each specific activity was implemented in one or more career education target school by at least one teacher.

19. Sr. High Trades classes were involved in Job Placement; work related jobs in class assignments; exploring litterpress and offset printing.
20. Sr. High Guidance Department went on a one-to-one basis in counseling format.

B. Infusion of activities into learning resource centers directed toward assisting students to discover their own interest and abilities in terms of careers.

C. Use of the "Valuing Approach to Career Education"

1. The valuing approach was used in the 4th grade learning centers.

D. Use of "Project Discovery Program"

1. Project Discovery to 7,8,9th grade classes.

E. Use of "Vocational Exploration Group" Program.

1. Interest test given to 9th graders.
2. Algebra aptitude test to 8th graders.
3. Career Education coordinator administered "Vocational Exploration Group" Program to small groups upon request.
4. Several sessions conducted by guidance department.
5. Used by counselors.

F. A program of interest and aptitude testing with a mechanism of feedback and guidance to students based on results.

1. Advisors brought students to Career Information Center.
2. Advisors and counselors interpreted ITED test results to students.
3. Use of COPs extensive.
4. COPs for Value Clarification class only.
5. Kuder Preference for Values Clarification class.
6. GATB available for use.

G. Student assessment center

1. Tutoring and testing available in Career Information Center.

H. Infusion of valuing activities in Teacher Advisor Program

I. Interest and aptitude testing program with guidance/advisor assistance based on results.

1. Advisors and counselors interpreted results of ITED tests to students.
2. Use of Kuder Preference and COPs with Value Clarification class.

J. Infusion of activities into existing curriculum directed toward assisting students to discover what values effect career choice and to discover their own values.

1. Clarification of Values is a 2nd semester theme of 8th grade Basic Studies.
2. Students arranged a visit to a court trial.
3. The 8th grade Basic Studies class had a unit on Warm and Fuzzy "To Kill a Mockingbird"--prejudice and empathy unit.
4. The 6-7th grade Basic Studies students had units which all included values clarification and dealt with their relation to work and careers.
5. The 6-9th grade classes discussed in conference strengths and weaknesses and how they affected careers. How career would affect life style.
6. The 6-9th grade classes also did the values clarification exercise.
7. The T/A grades took the interest survey, had conferences and discussions.
8. This was done in Social Studies and English in Sr. High classes.
9. English classes had filmstrips on Careers--discussion of living expenses vs incomes helpful; Nebraska Curriculum Stress values and value systems.
10. Business classes had class discussions; guest speakers; self evaluation exercises.
11. Home Economics classes had HERO, Values Clarification activities; tapes and filmstrips.
12. Trades classes had Post-High Education; by relating what employers want.
13. The Guidance Department held Values Clarification class and involved VEG.

II. Students will demonstrate increased competency in basic academic/ vocational skills.

A. Infusion of activities into existing curriculum directed toward assisting students to understand the importance of basic skills to career entry and success.

1. Environmental Units, Industrial Units and specific book assignments were used in 8th grade Basic Studies.
2. Activity cards used in the 7th grade Basic Studies class.
3. The 8-9th grade Business students took a field trip to a bank.
4. The T/A students had individual conferences discussing questionnaires.
5. The 8th grade Basic Studies students did term papers on careers--their writing assignments in English.
6. The 6-7th grade Basic Studies students infused careers in all aspects of Basic Studies curriculum.
7. The T/A students evaluated tests, and discussed them.
8. In reading, the students did reading and researching careers (Voluntary).
9. In Art classes the instruction is geared to showing the students how certain techniques and skills can apply towards an art career or other interests.

10. The 6-9th grade students had reading orientation.
11. In 9th grade English, the students--both in class and outside writing (personal) compared to professional authors, procedures at same, films, etc.

III. Students will demonstrate increased awareness of work values and possess a desire to engage in paid and/or unpaid work.

A. Infusion of activities into existing curriculum directed toward developing in students a positive attitude toward work and working.

1. Through the valuing approach this was applied in 1st and 5th grades.

B. Infusion of activities into learning resource centers directed toward developing in students a positive attitude toward work and working.

1. Applied in 4th and 1st grades.
2. 6-9th grade reading students were rewarded with "funny money" when they did their work. Received nothing if they didn't do their work.
3. The 6-9th grade students played the Value Clarification games.
4. The 6-9th grade reading students had funny money in payment for work--which can be spent on fun activities.
5. The 8th grade Basic Studies had point system and rewards for good work, prompt completion of assignments, helping others.
6. The 8th grade Basic Studies also had Johnny Tremain, discussion worksheets.
7. The 6-7th grade Basic Studies students infused in all aspects of curriculum--log book for example.
8. The 6-8th grade students had record and time sheets similar to work record. Record keeping was used also. Rewards and recognition were given.
9. In the Art classes, students used a positive approach--i.e., taking pride in personal accomplishments.
10. Held a Values Clarification Class.

C. Use of the "Valuing Approach to Career Education"

D. Infusion of activities into existing curriculum directed toward assisting students to understand the importance of basic skills to career entry and success.

1. English students were told about department stress; forms such as job applications, interviews through role play, writing business letters.
2. Math students were told about basic emphasis.
3. Business students held discussions; had speakers from business who stress entry-level skills; accepted only entry level class work for grading; taught classes like an office--room arranged in clusters to conform to business office.
4. Social Studies students indicated they emphasized development of basic skills.

5. Science students have a need for basics in any job emphasis; stress need for responsibility in relations to others.
6. Home Economics students stressed covering in sanitation and food handling through practice; use Public Health speakers who stressed importance of sanitation practices; interviewed food workers to determine reasons for employment; had tapes and filmstrips.
7. In Trades, students stressed job entry level skills; in welding students discover what they must know to be employed; and learned basic skills in lithography, plate making, stripping, opaquing, photography.

IV. Students will demonstrate increased awareness of and knowledge about work.

A. Infusion of activities into existing curriculum directed toward providing students an awareness of careers.

1. Fifth grade Social Studies and 1st grade Math.
2. Introduction of film on Careers in Health to 8th grade Health class.
3. "Free" reading book directly or indirectly depicted various careers to 6-9th grade reading class.
4. Field trip to Wards for World of Business Class.
5. Posters and class films to 9th grade English class.
6. Assembly line simulation; writing as a career to 8th grade Basic Studies class.
7. 6-7th grade Basic Studies visited Police Department; had the Dean of NU Engineering speak to class; a lawyer visited classes; and 2-handicapped visitors spoke on their careers.
8. Activities for the 6-9th grade Math classes was based on Career Education and included in assignments. They were matched with areas of interest and ability.
9. Some students in art classes periodically ask for information on art careers. One former student even returned for help a couple of times.

B. Use of Career Education field trips directed towards providing students an awareness of various careers.

1. All 5th grade Social Studies students went on field trips.
2. Occurred in the following classes: 8th & 9th grade Foods, 8th grade Basic Studies, 7th, 8th, 9th grade Human Studies, 9th grade World Studies, 7th, 8th, 9th grade Chorus, 9th grade Community Involvement, 8th & 9th grade Journalism, 7th grade Basic Studies, 9th grade Clothing, 7th, 8th grade Babysitting, 9th grade World Studies and 9th grade English and Journalism.
3. 6-9th grade reading classes went on field trips.
4. Interviewed a lawyer by 9th graders.
5. The 9th grade English class suggested and recommended that students visit community and high school and college theatre productions.
6. The 8th grade Basic Studies students shadowed government workers, answered questions, toured the police station.

7. The 6-7th grade Basic Studies students visited the police station, planetarium, county offices and historical society.
8. The Health classes took a field trip to Lincoln General Hospital, Norden Lab and the Health Fair.
9. One class had 23 field trips.
10. The English class had a Career Day and took a trip to a Mortuary.
11. The Math class took a trip to PSAB Computer Center.
12. The Business class had a Youth in Business Day; participated in exchange with Jr. High feeder schools; toured Insurance companies; banks, data processing center.
13. In Social Studies class the students toured a mortuary; EPIC Program-Social Service agencies.
14. In Science class the students toured the Medical Fair.
15. In Home Economics class the students toured Restaurants; Montessori School; Ruth Staples Lab; Interior Decoration Firms; Food Service Businesses; Furniture Store; and Fabric Stores.
16. In Trades classes the students toured TV and Radio stations; Square D; and visited 8 different types of graphic arts plants.

C. Use of Career Education resource speakers directed toward providing students an awareness of various careers.

1. The 5th and 1st graders involved police resource officer and bank representative.
2. Interviews with various people in 9th grade World Studies; 9th grade English; Journalism.
3. Shadowing in 9th grade World Studies and 9th grade Community Involvement.
4. Resource speakers in 7th, 8th, 9th grade Chorus; 7th, 8th grade Basic Studies; 9th grade Foods; 8th, 9th grade Clothing; 7th, 8th grade Babysitting; 8th, 9th grade Journalism.
5. Field trips in 8th, 9th grade Foods; 9th grade Clothing; 7th, 8th grade Babysitting; 7th, 8th grade Basic Studies; 7th, 8th and 9th grade Human Studies; 9th grade World Studies; 7th, 8th, 9th grade Chorus; 9th grade Community Involvement; 8th, 9th grade Journalism.
6. The 6th-9th grade students had a manager from Valentinos Pizza come and discuss the operation and jobs at the new 70th street location.
7. The Business classes had a resource speaker, salesman for KFOR.
8. The 9th grade English class had speakers from the Community come in--drama.
9. The 6-9th grades had KFOR Disc Jockey come to speak.
10. The 8th grade Basic Studies class had a poet, football player come to visit.
11. The 6-7th grade Basic Studies had the Dean of the College of UNL Engineering, the Mayor, a city council member, an astronomer, and 2-wheel chair persons speak to them on careers.
12. The 8th grade Health class had speakers on Nutrition, Alcohol, VD, and a police woman come in.
13. All Art students invited professional artists to demonstrate before the class. Also a potter, painter and a photographer came to class.

14. A Home Economics career day was held with 10 speakers from various fields within Home Economics.
15. One class had 32 speakers.
16. Sr. High English class the students had Sophomore English students assembly to hear speakers on careers using English foundations. They also had visits by EPIC teachers and students 10th grade classes to talk about Social Service work. They had radio disc jockey's, mortician, worker with mentally retarded and anthropologist speak to them also.
17. In Math classes at Sr. Highs, the students had an assembly for students with speakers from careers which were Math based (IBM, Vet, Architect, physicist, math teacher) and a bank employee.
18. In Business classes at Sr. Highs, students had Speakers from Successful Women in Business, former students talk about their work; State Farm employees on job interviews; Retail Credit on requirements for work; Metropolitan on responsibilities and promotions.
19. In Social Studies classes at Sr. Highs, they had speakers on content subjects with spin-off on own careers; psychology, Business Law and EPIC Seminars--Social Service work.
20. In Home Economics classes at Sr. Highs they heard speakers and representatives from HERO, Foods classes, Chefs from local businesses, President of Restaurant Association; Day Care workers; Community College; Interior Decoration workers; Department of Labor; Personnel directors; and store managers.
21. In Guidance departments at Sr. Highs, students heard from speakers from Job service; Military units; State Department of Labor.

D. Infusion of activities into learning resource centers directed toward providing students an awareness of various careers.

1. Occurred in primary 3rd and 4th grades.
2. In English class, the students were given an examination of careers using Library materials in Library Skills Unit; Unit on choosing a career; Examination of careers through literature; Unit on linquistics discusses career possibilities; Workshop developed for English teachers; Worksheets; Discussions; Objectives on job interests, applications.
3. In Math the students had an assembly with speakers from various businesses (done on departmental level).
4. In Business classes the students had career films; youth in business day; entire course career orientated (clerical intern - business courses).
5. In Social Studies classes the students had a U.S. History Unit on Business and Labor; Individual projects; Psychology course; Business Law course; Field trips; Speakers; Shadowing; Experimental work; 3-week unit on goals and values in choosing careers.
6. In Driver's Education class the students had worksheets to do.
7. In Home Economics the students had speakers; field trips; films; work experiences.
8. In Trades classes the students had field trips; speakers; job awareness in electronics; survey of jobs and job training needs in Lincoln; asked employers to list the class needs of students wanting to enter that career.

E. Use of "Career Day" directed toward providing an awareness of various careers.

1. Students worked with Rotary, the Career Education coordinator, and planned career day. Some 50 booths were set up in the school gym. The entire student body participated.

F. Infusion of activities into existing curriculum directed toward assisting students to discover what values effect career choice and to discover their own values.

1. Clarification of Values is a 2nd semester theme of 8th grade Basic Studies.
2. Students arranged a visit to a court trial.
3. The 8th grade Basic Studies class had a unit on Warm and Fuzzy, "To Kill a Mockingbird"--prejudice and empathy unit.
4. The 6-7th grade Basic Studies students had units which all included values clarification and dealt with their relation to work and careers.
5. The 6-9th grade classes discussed in conferences strengths and weaknesses and how they affected careers. How career would affect life style.
6. The 6-9th grade classes also did the values clarification exercises.
7. All T/A classes took the interest survey, had conferences and discussions.

G. Infusion of activities into existing curriculum directed toward assisting students to understand the importance of basic skills to career entry and success.

1. Environmental Units, Industrial Units and specific book assignments used in 8th grade Basic Studies class.
2. Activity cards used in 7th grade Basic Studies class.
3. The 8-9th grade Business students took a field trip to a local bank.
4. The T/A students had individual conferences discussing questionnaires.
5. The 8th grade Basic Studies students did term papers on careers--their writing assignments in English.
6. The 6-7th grade Basic Studies students infused careers in all aspects of Basic Studies curriculum.
7. The T/A students evaluated tests, and discussed them.
8. In reading, the students did reading and researching careers (voluntary).
9. In Art classes the instruction is geared to showing the students how certain techniques and skills can apply towards an art career or other interests.
10. The 6-9th grade students had reading orientation.
11. The 9th grade English students--both in class and outside writing (personal) compared to professional authors, procedures at same, films, etc.

H. Use of a specific program of preparation and follow up directed towards providing students community based experience of indepth study of selected careers.

1. Basic Studies class.
2. World of Manufacturing Class.
3. World of Construction Class.
4. Basic Skills 7th grade class used activity cards.
5. Community Involvement.
6. World Studies 9th grade class.
7. Each student in the World of Business class was encouraged to make a career study plus a shadowing experience.
8. The 8th grade Basic Studies students used a government booklet.
9. Through interviews and shadowing appointments with store buyers, electricians, legal assistants, candy factory workers, game warden, lawyer and veterinarian done by Career Education coordinator.

I. Infusion of activities into existing curriculum directed toward providing hands on experience in job tasks of selected careers.

J. Infusion of career information into "Individualized Industrial Arts" Program.

K. Use of the "World of Construction" Program.

1. In construction classes.

L. Use of the "World of Manufacturing" Program.

1. In manufacturing classes.

M. Use of the "Project Discovery" Program.

1. In 7th, 8th, and 9th grades by the use of Project Discovery.

N. Career Information Centers directed toward providing students an awareness of various careers.

1. Students were brought to career information center to acquaint them with services possible.
2. Done by the main center and satelite center.
3. There is no central center; however, materials are available in library and guidance offices; staff refers students to available materials in library and guidance offices.

O. Use of Career Information Centers to provide students with in-depth information about careers including such items as pay, working hours, entry level criteria, etc.

1. Advisors brought students to career information center.
2. This was done at central center and satelite center.
3. Material diffused between library and counseling offices; both guidance staff and media staff direct students to this information; available to all students.

V. Students will demonstrate increased competency in career decision-making skills.

A. Infusion of activities into existing curriculum directed toward assisting students to discover their own interests and abilities in terms of careers.

1. In 8th grade Basic Studies, Industrial and Environmental Units.
2. In World of Manufacturing shown abilities in manufacturing and construction.
3. In World of Construction shown abilities in manufacturing and construction.
4. In 7th grade Basic Studies shown travel, advertising, maps and activity cards.
5. Self-esteem test was given.
6. For the reading students, individual conferences, book selections were given.
7. 6-9th grade Instrumental classes gave performances for the public.
8. The 8th grade Basic Studies class had job interview activities, interest survey--Project Discovery.
9. The 6-7th grade Basic Studies classes conferences with each student. Personal interviews done by students. Many forms had to be filled out.
10. The 6-9th grade classes talked about goals, interests, abilities, tests results.
11. The 6-9th grade students were given questionnaires in T/A.
12. All grades were given the T/A survey.
13. The 8-9th grades had individual conferences with art students who might be considering careers in art.
14. The 9th grade English class had planning sessions with students, Decision-making.
15. English classes had filmstrips on careers; use of careers listing for library unit; worksheets and class discussion.
16. Math classes had involvement informally in senior classes.
17. Business classes had readings on careers; readings on job descriptions; readings on Labor Dept. statistics; and complete units on major office duties.
18. Social Studies classes had involvement in Economics, Psych, Business Law, Current Problems and EPIC Volunteer assignments.
19. In Home Economics classes the students were involved by HERO; Values Clarification activities; preview of jobs; qualifications, tests of their abilities.
20. In Trades classes the students were involved by Job Placement; work related jobs in class assignments; exploring litterpress and offset printing.
21. The Guidance Department went on a one-to-one basis in counseling format.

B. Infusion of activities into learning resource centers directed toward assisting students to discover their own interest and abilities in terms of careers.

1. Use the valuing approach in 4th grade learning centers.

C. Infusion of activities into existing curriculum directed toward assisting students to understand the relationship between skills taught in school and their application in various careers.

1. VEG was used in the 7th and 9th grades.
2. In the World of Business--8th and 9th grades the students were encouraged to make a career study plus a shadowing experience.
3. The T/A students held flea market decisions, group decision-making on activities.
4. The 8th grade Basic Studies students planned assembly line; persuasion techniques, ads to sell specific audiences, propaganda unit.
5. The 6-7th grade Basic Studies infused all aspects of careers into curriculum.
6. In 6-8th grade math, the students had independent math--at several points child makes decision if more study or continue; also alternate assignments and activities are given.
7. All art instruction includes the need for this in all students. They must have opinions and make choices.
8. All work in the 6-9th grade is independent. Students plan their day's work. Can choose from among many activities.
9. Group planning is done at the 9th grade English T/A level.
10. English class students had Pride in Language books for reluctant readers are helpful; stress value of correct punctuation as applicable to lawyer in court, to secretary, etc; worksheet exercises; "In all areas do this".
11. Business class students had class reports, discussions; daily paper work, workbooks, practice sets, office packets, etc; life skills applications--teach typing as a vocational course.
12. Social Studies students had "An objective in my courses".
13. Science students had need for math, reading for success in any job; and need for being dependable.
14. Home Economics students were told of foods and nutrition classes explore employment areas on trips; preparation of food items to simulate cafe experiences; use of tapes and filmstrips.
15. Trade classes students were shown the work at school compared to job activity; efforts to get post high school credits for high school programs; by letting students work on the others cars; shop projects related to industry jobs.

D. Infusion of activities into existing curriculum directed toward developing in students basic career decision-making skills.

1. Guidance Dept--used card file, VEG, and folders on 10th and 11th grade students on tentative plans for work.
2. English class--an example was a mock trial being instrumental in getting a girl interested in law career.
3. In Business class--the use of follow-up activities; excellent set of vocational and professional type filmstrips; literature in room 150; key punch links receipts; instruction is career based.
4. Social Science class used Business Law and Economics.
5. The Driver's Ed class used reading material alterting students to career choices; request of entry.

6. Trades class shared information on 20 different careers by the people who hire in each career; uses of chemicals and inks in printing; and shared on the job experiences in labs.
7. Various things were offered in Health related courses.
8. General decision making skills were offered in Home Economics.

E. Use of "Vocational Exploration Group" Program.

1. Interest test given to 9th graders.
2. Algebra aptitude test given to 8th graders.
3. Career Education coordinator administered "Vocational Exploration Group" Program to small groups upon request.
4. Several sessions conducted by Guidance Department.
5. Used by counselors.

F. Student assessment center.

1. Tutoring and testing available in Career Information Center.

G. Infusion of activities into existing curriculum directed toward assisting students to discover what values affect career choice and to discover their own values.

1. This was done in Social Studies and English Sr. high classes.
2. English classes had filmstrips on Careers--discussion of living expenses vs incomes helpful; Nebraska Curriculum Stress value and value systems.
3. Business classes had class discussions; guest speakers; self evaluation exercises.
4. Home Economics classes had HERO, Values Clarification activities; tapes and filmstrips.
5. Trades classes had Post-High education; by relating what employers want.
6. The Guidance Department held Values Clarification Class and involved VEG.

H. Infusion of valuing activities in Teacher Advisor Program.

I. Program for post high school planning for use with graduating seniors and early exiting students.

VI. Students will demonstrate good work habits.

VII. Students will demonstrate work-seeking and work-getting skills.

A. Provide students assistance in course selection based on their interests and abilities.

B. Use of "Vocational Exploration Group" Program.

1. Career Education coordinator administered "Vocational Exploration Group" Program to small groups upon request.
2. Several sessions conducted by Guidance Department.

3. Used by counselors.
4. Interest test given to 9th graders.
5. Algebra aptitude test given to 8th graders.

C. Co-op education programs.

1. In Business classes Coop Office Occupations are offered.
2. In Home Economics class, Foods career class and child care careers are offered.
3. In Trades and Industrial Arts, unstructured placement work is offered.
4. In Health Relations course--health intern program is offered.

D. Paid and non-paid community placement.

1. Career Education coordinator placed business students in LEX program in National Guard, Volunteer services and child care classes.
2. Part and full time jobs were found.
3. Placement in EPIC.
4. One English teacher had secured jobs for 5 of her students.
5. In Business class the intern program proved that one teacher routinely places students in paid jobs because of her business contacts.
6. One teacher in Art has placed 8 students in professional jobs in photography.
7. Home Economics students are placed through foods careers and exploring childhood programs; upholstery work, retail sales in fabrics, cleaning establishment.
8. Trades students are placed in machines jobs and some are placed in jobs related to course work (welding, auto-mechanic, etc).
9. One student from the Health related course was placed as part of careers course.

E. Guidance/advisor assistance in course selection based on career interest aptitude and goals.

1. Advisors work with students during registration.
2. On-going as part of regular counseling routines.

F. Individual Instructional Packets geared to student interest and aptitudes.

G. Individual Instructional Packets geared to entry level criteria of various occupations, education or training programs.

VIII. Students who are leaving the formal education system will be successful in being placed in a paid occupation, in further eudcation, or in unpaid work that is consistent with their current career education.

A. Exiting Placement Program

1. This was done by counselors with assistance from Career Education coordinator--seniors interested in jobs are invited to come and look at the list ocmpiled by Career Education coordinators from job services.

2. Counselors sent to placement office a list of graduating seniors needing jobs.

IX. Students will be aware of means available for continued education once they have left the formal educational system.

A. Exiting Placement Program.

1. This was done by counselors with assistance from Career Education coordinator--seniors interested in jobs are invited to come and look at the list compiled by Career Education coordinators from job services.
2. Counselors send to placement office, a list of graduating seniors needing jobs.

B. Program for post high school planning for use with graduating seniors and early exiting students.

Appendix 4

Career Education Project Teacher Feedback

Lincoln Public Schools
Lincoln, Nebraska

CAREER EDUCATION PROJECT -- TEACHER FEEDBACK

In order to document the degree of career related activities taking place within the Lincoln schools, the Career Education Project asks you to take 5 minutes and answer the following questions. Thank you for your cooperation.

1. The name of your school. _____

2. The grade level to which you are assigned (check one)
   K – 6 _____
   7 – 9 _____
   10 – 12 _____

3. Were you teaching in the Lincoln Public Schools last year?
   1. _____ Yes
   2. _____ No

4. Are you part of the guidance and counseling staff?
   1. _____ Yes
   2. _____ No

5. Have you attended any inservice activities to familiarize you with career education concepts and basic methodology of career education in the schools? (This includes such activities as midyear or summer workshops, meetings with the Career Education staff, departmental meetings related to Career Education, Career Education related to guidance, etc.)
   1. _____ Yes
   2. _____ No

6. If you answered "Yes" to Number 5, please estimate the number of hours you have spent in in-serivce.
   Estimated number of hours _____

7. Have you planned and carried out any career education activities in your work with students this year?
   1. _____ Yes
   2. _____ No

8. If your answer to Number 7 was "Yes," please estimate the number of activities.
   Estimated number of activities _____

9. Have you utilized resource persons from business, industry, etc., in Career Education activities for students?
   1. _____ Yes
   2. _____ No

10. If your answer to Number 9 was "Yes," please estimate the number of times used.
    Estimated number of times used _____

Appendix 5

Summary Data on Valuing Approach to Career Education

APPENDIX 5

Summary Data on Valuing Approach
to Career Education[1]

Grade Level	Test	Number items in tests	PRETEST			POSTTEST		
			Number Students	Mean Score	Mean Percent	Number Students	Mean Score	Mean Percent
2nd	K-2,E	13	20	11.2	85.8	18	11.8	90.6
3rd	3-5,A	12	24	8.7	72.2	25	11.6	96.3
4th	3-5,E	13	19	7.4	56.7	18	10.1	77.4
5th	3-5,A	12	24	10.5	87.5	24	11.4	95.1
6th	Jr.Hi	12	17	7.5	62.3	17	8.2	68.6
7th	Jr.Hi	12	21	8.2	68.7	22	8.1	67.8
8th	Jr.Hi	12	19	7.4	61.8	18	8.2	68.1

[1]Results based on use of "Valuing Approach" in one school.

LEARNING SEQUENCE (A) TEST

Evaluation Statements	Lesson Reference	Correct Responses
The statue on my Dedicated To Me sheet looked like everyone else's statue.	1	No
My Me Museum exhibit will let me tell others in the class about myself.	2	Yes
If everyone in my class went to the circus, we would all describe it in the same way.	3	No
Benjamin Beadstringer bought everyone in his class a different birthday gift.	4	No
All teachers like to go fishing.	5	No
School is the only place where I can learn things.	6	No
The beaver can cut down trees with his strong teeth and jaws.	7	Yes
The first farmer drove a tractor.	8	No
If the wheel had never been invented, I could still ride my bicycle.	9	No
Buddy, the Seeing-Eye Dog, was working when he led the woman to the library.	10	Yes
I am both a consumer and a producer.	11	Yes
A valuable worker is a useful person.	12	Yes

93

LEARNING SEQUENCE (E) TEST

Evaluation Statements	Lesson Reference	Correct Response
Hannibal and Plushy were trying to invent glue.	1	Yes
A tool can help me reach farther than I could with just my arm and hand.	2	Yes
Some things get easier to do as I get older.	3	Yes
When I was a baby, I could write my name.	4	No
I can still wear my baby clothes.	5	No
Hannibal, Justin, and Plushy all wanted to be dancers when they grew up.	6	No
All of the children in my class have blue eyes.	7	No
Everybody has the same favorite food.	8	No
As I get older, I will probably like to play with different toys.	9	Yes
With 15¢ I could buy a new bicycle.	10	No
In the Earn and Spend Game, we spent all our play money on candy and toys.	11	No
I can name something that makes me happy.	12	Yes
I know how to cheer myself up when I am sad.	13	Yes

LEARNING SEQUENCE (E) TEST

Evaluation Statements	Lesson Reference	Correct Response
A policeman wears a uniform so everyone will know who he is.	1	Yes
The only reason a fireman wears a uniform is to keep his own clothes from getting dirty.	2	No
Ms. Price, the sales clerk at Milligan's Department Store got in trouble because she wore slacks to work	3	Yes
When the Bellamy family first arrived in the town of Buildit, they were greeted by many friendly local people.	4	No
In the story The Factory That Went Squeak, Oliver had a very important job.	5	Yes
If after meeting a wealthy carpenter, my father said, "All carpenters are rich," he would be stereotyping.	6	Yes
The repairman fixing Mr. Burger's roof had to make a decision that would affect other people as well as himself.	7	Yes
Everyone should always be able to do his own thing and not worry about other people.	8	No
Some jobs are work for certain people and play for other people.	9	Yes
When I'm pantomiming a job in the Worker Charades Game, I must make sure that I do not talk.	10	Yes
Each community needs only a doctor, a banker, and a carpenter.	11	No
In The Tale of Miserable Mountain Sir Straight-ahead won the race and married the beautiful princess.	12	No
The only reason people work is to make money.	13	No

Appendix 6

Revised Outcome Question/Treatment Group Matrix

REVISED
OUTCOME QUESTION/TREATMENT
GROUP MATRIX

OUTCOME QUESTIONS	BROWNELL	BLESSED SACRAMENT		EAST	GOODRICH	MICKLE	BLESSED SACRAMENT		EAST	NORTHEAST	LINCOLN HIGH	PIUS
I. INCREASED SELF-AWARENESS												
A. Have students increased their ability to describe their own current abilities and limitations?	X			X	X	X	X		X	X	X	X
B. Have students increased their ability to describe their own current interest and values?	X	X		X	X	X	X		X	X	X	X
C. Do students display more positive attitudes toward themselves?												
D. Have students increased their recognition that social, economic, educational, and cultural forces influence their development?												
II. INCREASED BASIC ACADEMIC/VOCATIONAL SKILLS												
A. Have students increased their level of generally useful numerical skills?				X	X	X						
B. Have students increased their level of generally useful communication skills?				X	X	X						
C. Have students increased their level of generally useful information processing skills?												
D. Have students increased their level of generally useful decision-making skills?												
E. Have students increased their level of generally useful interpersonal skills?												
III. INCREASED AWARENESS OF WORK VALUES												
A. Have students increased their recognition of the bases of various work values?		X					X		X	X	X	
INCREASED DESIRE TO ENGAGE IN PAID AND/OR UNPAID WORK												
B. Do students possess more positive attitudes toward paid and unpaid work?	X				X				X	X	X	
IV. INCREASED AWARENESS OF AND KNOWLEDGE ABOUT WORK												
A. Have students increased their knowledge regarding the major duties and required abilities of different types of paid and unpaid work?	X	X		X	X	X	X		X	X	X	X

Revised 12/75

76

	BROWNELL	BLESSED SACRAMENT		EAST	GOODRICH	MICKLE	BLESSED SACRAMENT		EAST	NORTHEAST	LINCOLN HIGH	PIUS
B. Have students increased their knowledge of differences in work conditions and life styles associated with different types of paid and unpaid work?	X	X		X	X	X	X		X	X	X	X
C. Have students increased their knowledge of entry requirements for major types of paid and unpaid work?	X	X		X	X	X	X		X	X	X	X
D. Have students increased their knowledge of the impact of social and technological change in paid and unpaid work?	X	X		X	X	X	X		X	X	X	X
E. Have students increased their knowledge of the important factors that affect work success and satisfaction?	X	X		X	X	X	X		X	X	X	X
V. INCREASED CAREER DECISION-MAKING SKILLS												
A. Have students increased their ability to associate their own abilities and limitations with possible success in present or future paid and unpaid work?	X			X	X	X			X	X	X	X
B. Have students increased their ability to relate their personal interests and values to types of paid and unpaid work and their associated life-styles?	X			X	X	X			X	X	X	X
C. Have students increased their ability to (a) identify, (b) locate, and (c) utilize sources of information to solve career decision-making problems?				X	X	X			X	X	X	X
D. Have students increased their ability to determine the potential for future advancement/personal growth in work of their choosing?				X	X	X			X	X	X	X
E. Have students increased their knowledge of the steps to be taken and the factors to be considered in career planning?				X	X	X			X	X	X	X
F. Have students increased their active involvement in career decision-making?					X	X			X	X	X	X
VI. IMPROVED WORK HABITS												
A. Are students able to plan work effectively?												
B. Are students more adaptable to varied work situations?												
C. Do students have a more positive attitude towards the concepts of quality in relation to a work task?												
D. Do students have a more positive attitude towards conservation of environmental and human resources in accomplishing work tasks?												

Revised 12/75

	BROWNELL	BLESSED SACRAMENT		EAST	GOODRICH	MICKLE	BLESSED SACRAMENT		EAST	NORTHEAST	LINCOLN HIGH	PIUS
E. Do students have a more positive attitude towards responsibility for their own behavior and accomplishment of self-imposed work tasks?												
F. Do students demonstrate an increased desire for continuous learning both in school and out?												
VII. INCREASED WORK SEEKING AND WORK GETTING SKILLS												
A. Have students increased their ability to (a) identify, (b) locate, and (c) utilize sources that contain information about paid and unpaid work?				X					X	X	X	X
B. Have students increased their level of skills required in (a) applying for, and (b) accepting work?					X				X	X	X	X
VIII. PLACEMENT												
A. How many students have been placed or are engaged in further education and how does this compare with prior years?									X	X	X	X
B. How many students have been placed in a paid occupation, and how does this compare with prior years?									X	X	X	X
C. Of those placed in (a) further education, and (b) employment, how many consider the placement to be consistent with their career plans?									X	X	X	X
D. Of those not placed in further education or in a paid occupation, how many are engaged in (a) unpaid work consistent with their career plans, and how does this compare with prior years?									X	X	X	X
IX. INCREASED AWARENESS OF MEANS FOR CONTINUED EDUCATION												
A. Have students increased their ability to identify sources of additional education in major types of paid and unpaid work?									X	X	X	X
B. Have students increased their ability to identify means to support additional education for themselves in major types of paid and unpaid work?									X	X	X	X

Revised 12/75

Appendix 7

Summary Data on 1974-75 Sampling Plan

TABLE 1

NUMBER OF 12TH GRADE RESPONDENTS BY SUBTEST BY SCHOOL[1]

	SE	NE	LHS[2]	East	Pius
Career Maturity Inventory					
Part 1	42	46	32	47	10
Part 2	45	45	33	43	9
Part 3	44	42	45	38	8
Part 4	40	49	30	36	9
Assessment of Career Development[3, 4]					
Form 1	41	47	22	37	11
Form 2	42	46	27	43	10
Form 3	40	40	30	37	9
Form 4	41	40	25	48	11
Total Respondents	335	355	234	329	77
Largest Number	45	49	35	48	11
Smallest Number	40	40	22	36	8
Range	5	9	13	12	3

[1]LPS Survey not included.

[2]Includes some 10th & 11th Graders.

[3]Translation program for ACD was more involved, more answer sheets were rejected therefore total number of respondents, for some schools, slightly lower.

[4]Form 1 includes Subscore 1 and 2, Form 2 includes Subscores 2 and 5, Form 3 includes Subscore 3 and 4 and Form 4 includes Subscore 6.

TABLE 2

NUMBER OF 9TH GRADE RESPONDENTS BY SUBTEST BY SCHOOL

	EJH	GJH	MJH	Pius	EJH	LJH	PJH
Career Maturity Inventory							
Part 1	24	16	39	19	9	30	30
Part 2	20	17	37	18	8	29	30
Part 3	20	17	39	20	9	29	32
Part 4	21	17	37	19	8	29	33
Assessment of Career Development							
Form 1	20	16	34	17	8	28	30
Form 2	17	15	34	18	7	28	30
Form 3	18	17	33	18	8	27	29
Form 4	13	17	32	16	7	28	29
Total Respondents	153	132	285	145	64	228	243
Largest Number	24	17	39	20	9	30	33
Smallest Number	13	15	32	16	7	27	29
Range	11	2	7	4	2	3	4

Appendix 8

Summary Data on Student Outcomes

TABLE 1

Summary Data for Student Outcome III-B

III Students will demonstrate increased awareness of work values and posses a desire to engage in paid and/or unpaid work

B Students will possess positive attitudes toward paid and unpaid work

	Career Education Students	Control Students	Significance of Difference
Twelfth Grade			
Career Maturity Inventory			
Attitude Scale			
Number of Students*	250	146	Not Signifi-
Mean Score	35.85	37.18	
Standard Deviation	5.66	3.94	cant

*A matrix sampling procedure was used to estimate the scores of each group on the CMI Attitude Scale therefore the N is misleading. The number of item responses was approximately equal to an N of 63 for the career education group and 37 for the control group.

TABLE 2

Summary Data for Student Outcome IV-A

IV. Students will demonstrate increased awareness of and knowledge about work.

A. Students will know the major duties and required abilities of different types of paid and unpaid work.

	Career Education Students	Control Students	Significance of Difference
Ninth Grade			
Assessment of Career Development			
Subscore 1 Occupational Characteristics			
Number of Students	87	66	Not
Mean Score	35.38	36.39	Signifi-
Standard Deviation	8.70	9.96	cant
Subscore 3 Exploratory Occupational Experience			
Number of Students	78	64	
Mean Score	1.73	1.84	$p < .05$
Standard Deviation	0.25	0.25	
Career Maturity Inventory			
Part 1 Knowing Yourself			
Number of Students	98	69	Not
Mean Score	13.31	13.20	Signifi-
Standard Deviation	3.42	3.83	cant
Part 2 Knowing About Jobs			
Number of Students	92	67	Not
Mean Score	14.97	15.22	Signifi-
Standard Deviation	3.33	3.62	cant
Twelfth Grade			
Assessment of Career Development			
Subscore 1 Occupational Characteristic			
Number of Students	80	41	Not
Mean Score	40.65	39.93	Signifi-
Standard Deviation	8.83	11.64	cant
Subscore 3 Exploratory Occupational Experience			
Number of Students	76	41	Not
Mean Score	1.78	1.79	Signifi-
Standard Deviation	0.27	0.29	cant
Career Maturity Inventory			
Part 1 Knowing Yourself			
Number of Students	88		Not
Mean Score	13.66	13.81	Signifi-
Standard Deviation	3.22	3.31	cant
Part 2 Knowing About Jobs			
Number of Students	87	45	Not
Mean Score	16.78	17.78	Signifi-
Standard Deviation	2.88	2.52	cant

TABLE 3

Summary Data for Student Outcome IV-B

IV. Students will demonstrate increased awareness of and knowledge about work.

B. Students will know differences in work conditions and life styles associated with different types of paid and unpaid work.

	Career Education Students	Control Students	Significance of Difference
Ninth Grade			
Assessment of Career Development			
Subscore 1 Occupational Characteristics			
Number of Students	87	66	Not Signifi-
Mean Score	35.38	36.39	
Standard Deviation	8.70	9.96	cant
Twelfth Grade			
Assessment of Career Development			
Subscore 1 Occupational Characteristics			
Number of Students	80	41	Not
Mean Score	40.65	39.93	Signifi-
Standard Deviation	8.83	11.64	cant

TABLE 4

Summary Data for Student Outcome IV-C

IV. Students will demonstrate increased awareness of and knowledge about work.

C. Students will know entry requirements for major types of paid and unpaid work.

	Career Education Students	Control Students	Significance of Difference
Ninth Grade			
Assessment of Career Development			
Subscore 2 Occupational Preparation Requirements			
Number of Students	87	66	Not Significant
Mean Score	10.37	10.92	
Standard Deviation	3.21	3.18	
Career Maturity Inventory			
Part 4 Looking Ahead			
Number of Students	94	70	Not Significant
Mean Score	13.21	13.84	
Standard Deviation	3.65	3.15	
Twelfth Grade			
Assessment of Career Development			
Subscore 2 Occupational Preparation Requirement			
Number of Students	80	41	Not Significant
Mean Score	12.15	11.90	
Standard Deviation	2.90	3.32	
Career Maturity Inventory			
Part 4 Looking Ahead			
Number of Students	88	40	Not Significant
Mean Score	13.94	13.18	
Standard Deviation	3.82	4.13	

TABLE 5

Summary Data for Student Outcome IV-D

IV. Students will demonstrate increased awareness of and knowledge about work.

D. Students will know the impact of social and technological change on paid and unpaid work.

	Career Education Students	Control Students	Significance of Difference
Ninth Grade			
Assessment of Career Development			
Subscore 4 Career Planning Knowledge			
Number of Students	84	65	Not Significant
Mean Score	25.25	25.54	
Standard Deviation	4.89	5.51	
Twelfth Grade			
Assessment of Career Development			
Subscore 4 Career Planning Knowledge			
Number of Students	83	42	Not Significant
Mean Score	27.29	27.93	
Standard Deviation	5.60	4.59	

TABLE 6

Summary Data for Student Outcome IV-E

IV. Students will demonstrate increased awareness of and knowledge about work.

E. Students will know the important factors that affect work success and satisfaction

	Career Education Students	Control Students	Significance of Difference
Ninth Grade			
Career Maturity Inventory			
Part I Knowing Yourself			
Number of Students	98	69	Not Significant
Mean Score	13.31	13.20	
Standard Deviation	3.42	3.83	
Twelfth Grade			
Career Maturity Inventory			
Part I Knowing Yourself			
Number of Students	88	42	Not Significant
Mean Score	13.66	13.81	
Standard Deviation	3.22	3.31	

TABLE 7

Summary Data for Student Outcome V-A

V. Students will demonstrate increased competency in career decision-making skills.

A. Students will be able to associate their own abilities and limitations with possible success in present or future paid and unpaid work.

	Career Education Students	Control Students	Significance of Difference
Ninth Grade			
Career Maturity Inventory			
Part 1 Knowing Yourself			
Number of Students	98	69	Not Significant
Mean Score	13.31	13.20	
Standard Deviation	3.42	3.83	
Part 3 Choosing a Job			
Number of Students	96	70	Not Significant
Mean Score	12.97	12.54	
Standard Deviation	3.06	3.04	
Twelfth Grade			
Career Maturity Inventory			
Part 1 Knowing Yourself			
Number of Students	88	42	Not Significant
Mean Score	13.66	13.81	
Standard Deviation	3.22	3.31	
Part 3 Choosing a Job			
Number of Students	85	44	Not Significant
Mean Score	14.09	13.59	
Standard Deviation	2.80	3.10	

TABLE 8

Summary Data for Student Outcome V-B

V. Students will demonstrate increased competency in career decision-making skills.

B. Students will be able to relate their personal interests and values to types of paid and unpaid work and their associated life styles.

	Career Education Students	Control Students	Significance of Difference
Ninth Grade			
Assessment of Career Development			
Subscore 3 Exploratory Occupations			
Number of Students	78	64	Not
Mean Score	1.73	1.84	Signifi-
Standard Deviation	0.25	0.25	cant
Career Maturity Inventory			
Part 1 Knowing Yourself			
Number of Students	98	69	Not
Mean Score	13.31	13.20	Signifi-
Standard Deviation	3.42	3.83	cant
Part 3 Choosing a Job			
Number of Students	96	70	Not
Mean Score	12.97	12.54	Signifi-
Standard Deviation	3.06	3.04	cant
Twelfth Grade			
Assessment of Career Development			
Subscore 3 Exploratory Occupations			
Number of Students	76	41	Not
Mean Score	1.78	1.79	Signifi-
Standard Deviation	0.27	0.29	cant
Career Maturity Inventory			
Part 1 Knowing Yourself			
Number of Students	88	42	Not
Mean Score	13.66	13.81	Signifi-
Standard Deviation	3.22	3.31	cant
Part 3 Choosing a Job			
Number of Students	85	44	Not
Mean Score	14.09	13.59	Signifi-
Standard Deviation	2.80	3.10	cant

TABLE 9

Summary Data for Student Outcome V-C

V. Students will demonstrate increased competence in career decision-making skills.

C. Students will be able to identify, locate, and utilize sources of information to solve career decision-making problems.

	Career Education Students	Control Students	Significance of Difference
Ninth Grade			
Assessment of Career Development			
Subscore 4 Career Planning Knowledge			
Number of Students	84	65	Not Significant
Mean Score	25.25	25.54	
Standard Deviation	4.89	5.51	
Subscore 5 Career Planning Involvement			
Number of Students	86	64	Not Significant
Mean Score	1.71	1.75	
Standard Deviation	0.36	0.35	
Twelfth Grade			
Assessment of Career Development			
Subscore 4 Career Planning Knowledge			
Number of Students	83	42	Not Significant
Mean Score	27.29	27.93	
Standard Deviation	5.60	4.59	
Subscore 5 Career Planning Involvement			
Number of Students	79	40	Not Significant
Mean Score	1.93	2.04	
Standard Deviation	0.38	0.34	

TABLE 10

Summary Data for Student Outcome V-E

V. Students will demonstrate increased competency in career decision-making skills.

E. Students will know the steps to be taken and factors to be considered in career planning.

	Career Education Students	Control Students	Significance of Difference
Ninth Grade			
Assessment of Career Development			
Subscore 4 Career Planning Knowledge			
Number of Students	84	65	Not Significant
Mean Score	25.25	25.54	
Standard Deviation	4.89	5.51	
Career Maturity Inventory			
Part 1 Knowing Yourself			
Number of Students	98	69	Not Significant
Mean Score	13.31	13.20	
Standard Deviation	3.42	3.83	
Twelfth Grade			
Assessment of Career Development			
Subscore 4 Career Planning Knowledge			
Number of Students	83	42	Not Significant
Mean Score	27.29	27.93	
Standard Deviation	5.60	4.59	
Career Maturity Inventory			
Part I Knowing Yourself			
Number of Students	88	42	Not Significant
Mean Score	13.66	13.81	
Standard Deviation	3.22	3.31	

TABLE 11

Summary Data for Student Outcomes V-F

V. Students will demonstrate increased competency in career decision making.

F. Students will demonstrate active involvement in career decision making.

	Career Education Students	Control Students	Significance of Difference
Ninth Grade			
Assessment of Career Development			
Subscore 5 Career Planning Involvement			
Number of Students	86	64	Not
Mean Score	1.71	1.75	Signifi-
Standard Deviation	0.36	0.35	cant
Twelfth Grade			
Assessment of Career Development			
Subscore 5 Career Planning Involvement			
Number of Students	79	40	Not
Mean Score	1.93	2.04	Signifi-
Standard Deviation	0.38	0.34	cant

TABLE 12

Summary Data for Student Outcome VII-A

VII. Students will demonstrate work-seeking and work getting skills.

A. Students will be able to identify, locate, and utilize sources that contain information about existing paid and unpaid work possibilities.

	Career Education Students	Control Students	Significance of Difference
Twelfth Grade			
Assessment of Career Development			
Subscore 5 Career Planning Involvement			
Number of Students	79	40	Not
Mean Score	1.93	2.04	Signifi-
Standard Deviation	0.38	0.34	cant